

Volume

#

R0384

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FIELD NOTES

OF THE SURVEY OF THE

Of the Meridian,

In the State of

EXECUTED BY

In the capacity of U. S. Surveyor, under instructions dated 191, issued by the United States Surveyor General to govern surveys included in Group No., which were approved by the Commissioner of the General Land Office, 191, pursuant to authority contained in the Act of Congress dated 191.

Survey commenced 191.

Survey completed 191.

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Survey commenced , 191

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OF THE SURVEY OF THE

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Survey commenced , 191

Survey completed , 191

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FIELD NOTES

OF THE SURVEY OF THE

Of the Meridian,

In the State of

EXECUTED BY

In the capacity of U. S. Surveyor.... under instructions dated, 191....
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Survey commenced , 191....

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FIELD NOTES

OF THE SURVEY OF THE

Of the Meridian,

In the State of

EXECUTED BY

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Survey commenced 191.....

Survey completed 191.....

EB.

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4-670.

Filed Feb. 14, 1911.

WSH.

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KFB.

FIELD NOTES

OF THE SURVEY WORK

RETRACEMENT

OF THE

SOUTH, NORTH, AND WEST BOUNDARIES

OF

TOWNSHIP NO. 34 SOUTH, RANGE NO. 8 WEST,

Of the SALT LAKE BASE AND Meridian,

STATE OF UTAH

AS SURVEYED BY

Transitmen

John R. Stewart and Quinby Stewart, United States Surveyors,
their Assignment Group
under Contract No. 1, dated August 6, 1910

Survey commenced August 13, 1910,

Survey completed September 2, 1910.

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NAMES AND DUTIES OF ASSISTANTS.

Frank S. Allen, Chainman.

R. Bert Carter, Chainman.

Harvey W. Elliott, Moundman.

Alton Ivie, Axman.

Verne O. Nelson, Chainman.

Ruban W. Riley, Chainman.

Nicholas L. Sheffield, Moundman.

Isaac R. Hayes, Axman.

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Meanders Page _____

PRELIMINARY OATHS OF ASSISTANTS.

WE, Verne O. Nelson and Ruban W. Riley

do solemnly swear that we will well and faithfully execute the duties of chainmen; that we will level the chain upon even and uneven ground, and plumb the tally pins, either by sticking or dropping the same; that we will report the true distances to all notable objects, and the true lengths of all lines that we assist in measuring, to the best of our skill and ability, and in accordance with instructions given us, in the survey

Retracement fractional South bdy. T. 34 S., R. 8 W., S. I. B. & M., Utah.

Verne O. Nelson, Chainman

Ruban W. Riley, Chainman

Subscribed and sworn to before me this 13th

day of August, 1910



my commission expires June 13, 1913.

WE, I. Nicholes L. Sheffield

do solemnly swear that we will well and truly perform the duties of moundman in the establishment of corners, according to the instructions given us to the best of my skill and ability, in the survey

Retracement Fractional South Bdy. T. 34 S., R. 8 W., S. I. B. & M., Utah.

Nicholas L. Sheffield, Moundman

Subscribed and sworn to before me this 13th

day of August, 1910



my com. expires June 13, 1913. Notary Public

WE, I. Isaac R. Hayes

do solemnly swear that we will well and truly perform the duties of axman in the establishment of corner and other duties, according to instructions given us, to the best of my skill and ability, in the survey

Retracement Fractional South Bdy. T. 34 S., R. 8 W., S. I. B. & M., Utah.

Isaac R. Hayes, Axman

Subscribed and sworn to before me this 13th

day of August, 1910



my commission expires June 13, 1913.

I, John T. Mitchell, do solemnly swear that I will well and truly perform the duties of flagman according to instructions given me, to the best of my skill and ability, in the survey of

Flagman

Subscribed and sworn to before me this

day of August, 1910



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INDEX DIAGRAM.

Township 34 South, Range 8 West

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Meanders Page

PRELIMINARY OATHS OF ASSISTANTS.

IX. Frank S. Allen

R. Bert Carter

I, the undersigned, do solemnly swear and faithfully execute the duties of chainman; that we will level the ground upon which we stand, and plumb the tally pins, either by striking or dropping the same; that we will lay out the corner points to all fractional corners, and the true lengths of all lines that we assist in running, to the best of my skill and ability, and in accordance with instructions given us, in the surveying of Fractional North, and West bds. T. 34 S., R. 8. W. S. L. P. I., Utah.

Frank S. Allen, Chainman

R. Bert Carter, Chainman

At Salt Lake City, on the 13th,

August 190

John T. Mitchell

Notary Public
My commission expires June 13 1913

IX. Harvey H. Elliott

XII.

I, the undersigned, do solemnly swear and truly perform the duties of moundman in the establishment of corners, according to the instructions given me, to the best of my skill and ability, in the surveying of Fractional North, and West bds. T. 34 S., R. 8. W. S. L. P. I., Utah.

Harvey H. Elliott, Moundman

At Salt Lake City, on the 13th,

August 190

John T. Mitchell

Notary Public
My commission expires June 13 1913

IX. Alton Ivie

XIII.

I, the undersigned, do solemnly swear and truly perform the duties of axman in the establishment of corner points, according to the instructions given me, to the best of my skill and ability, in the surveying of Fractional North, and West bds. T. 34 S., R. 8. W. S. L. P. I., Utah.

Alton Ivie, Axman

At Salt Lake City, on the 13th,

August 190

John T. Mitchell

Notary Public
My commission expires June 13 1913

I, the undersigned, do solemnly swear that I will well and truly perform all the duties of flagman, according to the instructions given me, to the best of my skill and ability, in the surveying of Fractional North, and West bds. T. 34 S., R. 8. W. S. L. P. I., Utah.

Flagman

At Salt Lake City, on the 13th,

August 190

John T. Mitchell

Notary Public
My commission expires June 13 1913

Retracement West bdy. T.34 S., R.8 W.

Survey commenced August 13, 1910, and executed with a Gurley Explorer's transit, No. 957, with solar attachment. The horizontal limb is provided with two double verniers placed opposite to each other reading to single minutes of arc; which is also the least count of the latitude and declination arcs.

The instrument was examined, tested on the meridian at Salt Lake City, and found correct, and was approved by the surveyor general for Utah, on August 6, 1910.

I examine the adjustments of the transit, and correct the level and collimation errors.

Note: I arrived in the field too late in the evening Aug. 12th to make a complete test of instrument at this cor. without loosing considerable time; therefore see notes of Sub. T.34 S., R.8 W., for complete test of instrument.

At the cor. of Tps.34 and 35 S., R.8 W., latitude $37^{\circ}48'37''$ N., longitude $112^{\circ}46'22''$ W., I set off $37^{\circ}49'$ N., on the lat. arc; $14^{\circ}52'$ N., on the decl. arc; and at 7 n^r 5 m a.m., l.m.t., I determine a meridian with the solar.

Note: Before commencing the subdivision of this township I proceed to retrace some of the old lines adjacent to it.

X From the cor. of Tps.34 and 35 S., R.8 W., which is a sandstone, 8x10x5 ins. above ground, firmly set, and mkd. and witnessed as described by the surveyor general, I run

N. $0^{\circ}22'$ E., on a retracement line bet. secs.31 and 36.

59.82 Fall 2 lks. East of the $\frac{1}{4}$ sec. cor. bet. secs.31 and 36, which is a sandstone, 5x8x4 ins., above ground, firmly set and mkd. and witnessed as described by the surveyor general.

69.82 Fall 4 lks. East of the closing cor. of secs.25 and 36, T.34 S., R.9 W., which is a sandstone, 6x10x6 ins. above ground, firmly set, and mkd. and witnessed as described by the surveyor general.

79.60 Fall 5 lks. East of the cor. of secs.30 and 31, which is

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Retracement W.bdy.T.34 S., R.8 W.-Continued.

	Chains	a yellow sandstone, 8x12x4 ins. above ground, firmly set, and mkd. and witnessed as described by the surveyor general. The course of this line is therefore N.0°20'E., 79.60 chs. No change in topography from original notes.
		August 15, 1910.
		August 15, 1910: At 7 h 4 m a.m., l.m.t., I set off 57°49'N., on the lat.arc; 14°16'W., on the decl.arc; and determine a meridian with the solar, at the cor.of secs. 30, and 31. Thence I run N.0°22'E., on retracement line along west bdy.sec.30.
38.30	Fall 2 lks. East of the $\frac{1}{2}$ sec.cor., on W.bdy.sec.30., which is a yellow sandstone, 9x12 x8 ins. above ground, firmly set, and mkd. and witnessed as described by the surveyor general.	
72.10	Fall 4 lks. East of the closing cor.of secs.24 and 25, T.34 S., R.9 W., which is a sandstone, 12x12x6 ins., above ground, firmly set and mkd. and witnessed as described by the surveyor general.	
73.30	Fall 4 lks. East of the cor.of secs.19 and 30, which is a stationary sandstone, 4x5x2 ft. above ground, firmd. and o witnessed as described by the surveyor general. The course of this line is therefore N.0°20'E., 73.30 chs. No change in topography from the original notes.	
		August 15, 1910.
		August 16, 1910: At 7 h 4 m a.m., l.m.t., I set off 57°50'N., on the lat.arc; 13°56'W., on the decl.arc; and determine a meridian with the solar, at the cor.of secs.19 and 30.

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Retracement W.bdy.T.34.S.,R.8.W.-Continued.

Chains	
	Thence I run
	North, on a retracement line bet.secs.19 and 24.
	Over mountainous land; through dense undergrowth.
	Asc.gradually.
3.35	Road from Parowan to Panguitch,bears NW and SE.
13.00	Top of spur,150 ft.above cor.,bears N.70°E.and S.70°W. Enter scattering timber,bears N.70°E.and S.70°W. Desc.
21.50	Wash, 2 chs.wide,6 ft.deep,in hollow,50.ft.below spur, course W. Asc.
35.00	Top of spur,100 ft;above hollow,bears N.60°E.and S.60° W. Desc.
39.15	Bottom of hollow,75 ft.below spur,course W. Asc.
40.38	Fall 13 lks.East of the $\frac{1}{4}$ sec.cor.,which is a volcanic stone,10x8x6 ins.,above ground,firmlly set, and mkd.and witnessed as described by the surveyor general.
40.50	Top of spur,20 ft.above hollow,bears E.and W. Desc.
51.50	Wash,80 lks.wide,5 ft.deep,in bottom of hollow,25 ft. below spur,course W. Asc.
52.00	Enter heavy cedar and pinon pine,timber,bears E.and W.
69.00	Sandstone ledge,6 ft.high,on top of ridge,125 ft.above hollow,bears E.and W. Desc.
79.50	Bottom of gulch,150 ft.below ridge,course W. Asc.
80.05	Fall 26 lks.East of the cor.of secs.13,18,19, and 24 which is a volcanic stone,12x10x6 ins.,above ground, firmlly set, and mkd.and witnessed as described by the surveyor general.

Retracement W.bdy.T.34.S., R.8 W.-Continued.

Chains	The course of this line is therefore N.0°11'W., 80.05 chs. Land.mountainous.. Soil,red clay mixed with rock and gravel;2nd and 3rd rate. Timber,cedar and pinon pine. Undergrowth,sage brush. Subsoil,gravel and clay. Mountainous or heavily timbered land,or land covered with dense undergrowth,80.05 chs. August 16,1910:At this cor.I set off 13°51'N.,on the decl. arc;and at 0 h 4 m p.m.,l.m.t.,I observe the sun on the meridian,the resulting lat.is 37°51'N.,which is the proper lat.nearly.
	North, on a retrace ment line bet.secs.13 and 18. Over mountainous land;through heavy timber;and scattering sage brush. Asc. 1.15 Top of sharp spur,25 ft.above sec.cor.,bears E.and W. Desc. 16.20 Foot of descent,100 ft.below spur,bears NE and SW. Enter Parowan valley,rolling land,bears NE and SW. Leave timber and enter dense sage brush,bears NE and SW. 39.00 Wood road,bears E.and W. 39.51 Fall 3 lks.East of the $\frac{1}{4}$ sec.cor.bet.secs.15 and 18, which is a volcanic stone,10x6x6 ins.,above ground,firmlly set, and mkd.and witnessed as described by the surveyor general. 66.60 Wood road,bears NE and SW. 68.76 Wood road,bears NE and SW. 73.80 Power line,bears NE and SW.This line runs between Parowan and Paragonah. 76.60 County road from Parowan to Paragonah,bears NE and SW.

Chains Retracement W.bdy.T.34 S., R.8 W.-Continued.

- 76.80 Telephone line, Parowan to Paragonah, N.55°E., S.55°W.
- 79.82 Fall 7 lks. East of the cor. of secs. 7, 12, 13, and 18, which is a volcanic stone, 10x8x6 ins., above ground, firmly set, and mkd. and witnessed as described by the surveyor general. The course of this line is therefore N.0°3'W., 79.82 chs. The cor. stone is partly decayed therefore I destroy it and in the same place set an iron post as follows:
- Set an iron post, 3 ft/long, 3 ins. in dia., 24 ins. in the ground, for cor. of secs. 7, 12, 13, and 18, mkd. on brass cap
- . T 34 S in N half;
 - . R 9 W S 12 in NW.
 - . R 8 W S 7 in NE.
 - . S 18 in SE.; and
 - . S 13 in SW. quadrants; dig pits, 18x18x12 ins., in each sec; 5½ ft. dist; and raise a mound of earth, 4 ft. base, 2 ft. high, W. of cor.
- Land, mountainous and nearly level.
- South 16.20 chs. mountainous land, sloping to the west. and covered with cedar and pinon pine timber.
- North 63.62 chs. is nearly level valley sloping gently to the westward; the soil on this part of the mile is a mixture of sand and clay mostly clay about 18 ins. deep and the subsoil is white clay almost a hard pan.
- North 63.62 chs. is covered with a dense growth of sage brush.
- Mountainous or heavily timbered land, or land covered with dense undergrowth, 79.82 chs.

August 16, 1910.

Retracement North bdy.T.34 S.,R.8 W.

Retracement North bdy.T.34 S.,R.8 W.

August 19, 1910: At 7 h 4 m a.m., l.m.t., I set off $37^{\circ}54'N.$ on the lat.arc; $12^{\circ}59'W.$, on the decl.arc; and determine a meridian with the solar, at the cor.of secs. 4, 5, 32, and 33, on N.bdy.of Tp., which is a cobble stone, $6 \times 8 \times 6$ ins., above ground, firmly set, and mkd. and witnessed as described by the surveyor general.

Thence I run

East, on a retracement line betsecs. 4 and 33.

Over nearly level land in Parowan valley; through dense sage brush. Along fence, bears E.

5.17 Fence, bears N. and S.

8.50 N.edge of corral, is

18.25 End of fence, bears W.

30.00 Wash, 50 ft.wide, 8 ft.deep, course $N.75^{\circ}W.$

37.85 Old mill ditch, (dry), 20 lks.wide, 6 ft.deep, course NW.

40.41 Fall 8 lks.N. of the $\frac{1}{4}$ sec.cor.betsecs. 4 and 33, which is a conglomerate stone, $14 \times 10 \times 8$ ins. above ground, firmly set and mkd. and witnessed as described by the surveyor general. The stone is poorly mkd. therefore I destroy it and in the same place,

Set an iron post, 3 ft.long, 1 in.in dia. for $\frac{1}{4}$ sec.cor. 26 ins.in the ground. mkd.on brass cap $\frac{1}{4}$ S 33 in N half; and S. 4 in S half; and raise a mound of stone, 2 ft.base, $1\frac{1}{2}$ ft.high, N.of cor.

40.54 West edge of old flour mill,

40.90 East edge of mill.

41.75 Road from Paragonah to Red Creek Canon, bears $N.60^{\circ}W.$ and $S.60^{\circ}E.$

42.83 Red Creek, 12 lks.wide, 5 ins.deep, course $N.60^{\circ}W.$

49.85 Branch of Red Creek, 10 lks.wide, 2 ins.deep, course SW.

58.50 Branch of Red Creek, 5 lks.wide, 2 ins.deep, course $S.50^{\circ}E.$

67.80 Wood road, bears $N.40^{\circ}W.$ and $S.40^{\circ}E.$

75.00 Leave valley, and begin ascent of mountain, bears $N.20^{\circ}E$

Retracement North bdy. T. 34 S., R. 8 W.-Continued.

Chains

80.35 Fall 62 lks. S. of the cor. of secs. 3, 4, 33, and 34.

Note: The cor. stone has probably been washed out; but the southwest and northwest bearing trees are standing with the markings plainly visable; therefore I re-establish the cor. at the proper bearing and distances from these bearing trees as follows:

Set an iron post, 3 ft. long, 3 ins. in dia., 24 ins. in the ground, for cor. of secs. 3, 4, 33, and 34, mkd. on brass cap

T 33 S S 33 in NW.

R 8 W S 34 in NE.

R 8 W S 3 in SE.; and

T 34 S S 4 in SW. quadrants; I leave the old bearing trees as they are and raise a mound of stone, 2 ft. base $1\frac{1}{2}$ ft. high, W. of cor.

The course of the west half of this mile is therefore S. $89^{\circ}53' E.$, 40.41 chs.; and the east half is N. $89^{\circ} E.$, 39.94 chs.

West 75.00 chs. is in Parowan valley, sloping gently to the west; the soil is sandy and gravelly; 2nd rate; but there are a good many rocks mixed with the soil. This part of the mile is covered with a dense growth of sage brush. The east 5.35 chs. is on the west slope of the mountain very rocky; with only a small amount of soil which is clay. The subsoil on the entire mile is hard white clay and gravel.

Mountainous land, or land covered with dense undergrowth, 80.35 chs.

August 19, 1910: At this cor. I set off $12^{\circ}54' N.$, on the decl. arc; and at 0 h 4 m p.m., l.m.t., I observe the sun on the meridian, the resulting lat. is $37^{\circ}54' N.$, which is the proper lat. nearly.

Retracement North bdy.T.34 S., R.8 W.-Continued.

Chains	S. $89^{\circ}48' E.$, on a retracement line bet. secs. 3 and 34. Over mountainous land; through scattering cedar and pinyon pine timber and scattering sage brush.
	Asc. abruptly.
12.00	A ledge of sandstone, 20 ft. high, bears N. and S.
14.00	Top of ridge, 300 ft. above sec. cor., bears N. $80^{\circ}W.$ and S. $80^{\circ}E.$
	Desc.
17.25	Descend more abruptly, bears N. $70^{\circ}W.$ and S. $70^{\circ}E.$
	Enter heavy timber, bears N. $70^{\circ}W.$ and S. $70^{\circ}E.$
21.60	Bottom of hollow, 150 ft. below ridge, course N. $70^{\circ}W.$
	Asc.
24.50	Top of spur, 200 ft. above hollow, bears N. $70^{\circ}W.$ and S. $70^{\circ}E.$
	Desc.
30.50	Bottom of hollow, 125 ft. below spur, course NW.
	Asc. over ledges.
36.00	Foot of conglomerate ledge, 150 ft. high, bears N. and S.
39.00	Top of ledge, bears N. and S.
40.10	Fall 7 lks. South of $\frac{1}{4}$ sec. cor., which is a conglomerate stone, 8x10x9 ins., above ground, firmly set, and mkd. and witnessed as described by the surveyor general.
	The stone is partly decayed therefore I destroy it and in the same place
	Set an iron post, 3 ft. long, 1 in. in dia., 12 ins. in the ground, on solid rock, and surrounded by mound of stone, for $\frac{1}{4}$ sec. cor.. mkd. on brass cap $\frac{1}{4}$ S 34 in N half; and S 3 in S half; and raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$ ft. high, N. of cor. The bearing trees are in good condition therefore I leave them as they are.
47.50	Top of ridge, 800 ft. above hollow, bears NE and SW.
	Desc. abruptly.
53.50	Bottom of gulch, 300 ft. deep, course S.
	Asc. abruptly.

Retracement of N.bdy.T.34 S., R.8 W.-Continued.

Chains

- 57.10 Top of spur, 150 ft. above gulch, bears N. and S.
Desc. abruptly.
- 81.50 Fall 310 lks. South of the cor. of secs. 2, 3, 34, and 35,
which is a sandstone, 10x10x6 ins., above ground, firmly
set, and mkd. and witnessed as described by the surveyor
general. I destroy the old cor. and re-establish it at
the same point as follows:
Set an iron post, 5 ft. long, 3 ins. in dia., 12 ins. in the
ground, on solid rock, and surrounded by mound of earth
and stone, for cor. of secs. 2, 3, 34, and 35, mkd on brass
cap T 33 S S 34 in NW.

R 8 W S 35 in NE.

R 8 W S 2 in SE.; and

T 34 S S 3 in SW. quadrants; The old bearing trees
are in good condition; therefore I leave them as they are.
The course of the west half of this mile is therefore
S. 89° 54' E., 40.10 chs.; the east half is N. 85° 49' E., 41.51
chs.

This entire mile is very rough composed of high ridges
and deep gulches, draining and sloping southward into
Red Creek Canon.

Soil, red and white clay mixed with rock and gravel; 3rd
rate.

Timber, cedar and pinon pine.

Undergrowth, sage brush.

A very little grass.

Mountainous or heavily timbered land, 81.61 chs.

August 19, 1910.

August 20, 1910: At 7 h. 3 m. a.m., l.m.t., I set off 37° 54'
N., on the lat.arc; 12° 39' N., on the decl.arc; and determine

Retracement North bdy. T.34 S., R.8 W.-Continued.

Chains

a meridian with the solar, at the cor. of secs. 2, 3, 34, and 35.

Thence I run

East, on a retracement line bet. secs. 2 and 35.

Over mountainous land; through heavy timber and dense undergrowth.

Desc.

4.00 Red Creek, 15 lks. wide, 10 ins. deep, rapid current, rocky bottom, clear water, in bottom of Red Creek Canon, 100 ft below sec. cor., course SW.

Asc.

4.80 Road, bears N. 50° E. and S. 50° W.

16.50 Top of spur, 200 ft. above canon, bears N. and S.

19.00 Bottom of hollow, 100 ft. below spur, course N.

Asc.

25.00 Top of spur, 100 ft. above hollow, bears N. and S.

Desc.

35.00 Fall 46 lks. N. of the $\frac{1}{2}$ sec. cor., which is a red granite boulder, 4x3x3 ft. above ground, mfd. and witnessed as described by the surveyor general.

The boulder is partly decayed therefore I destroy the old cor. and re-establish it at the same point as follows: Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for $\frac{1}{2}$ sec. cor.. mfd. on brass cap $\frac{1}{4}$ S 35 in N half; and S 2 in S half; the bearing trees are in good condition therefore I leave them as they are.

39.00 Bottom of hollow, 50 ft. below spur, course N.

Asc.

41.00 Top of spur, 50 ft. above hollow, bears N. and S.

Desc.

42.50 Bottom of gulch, 100 ft. below spur, course N.

Asc.

47.00 Top of spur, 125 ft. above gulch, bears N. and S.

Desc. over conglomerate ledges.

Retracement N.bdy.T.34 S., R.8 W.-Continued.

- Chains 55.00 Hoosier Creek, 10 lks. wide, 8 ins. deep, in bottom of canon, 200 ft. below spur, course N.50°W.
Asc. over ledges.
- 73.43 Fall 134 lks. North of the cor. of secs. 1, 2, 35, and 36, which is a sandstone, 6x10x8 ins., above ground, firmly set, and mkd. and witnessed as described by the surveyor general. The stone is partly disintegrated therefore I destroy all traces of it and set an iron post in its place as follows:
Set an iron post, 3 ft. long, 3 ins. in dia., 14 ins. in the ground, on solid rock; and surrounded by mound of earth and stone, for cor. of secs. 1, 2, 35, and 36, mkd. on brass cap
- T 33 S S 35 in NW.
- R 8 W S 36 in NE.
- R 8 W S 1 in SE.; and
- T 34 S S 2 in SW. quadrants; No change in the old bearing trees.
- The course of the west half of this mile is therefore S.89°15'E., 35.00 chs.; the east half is S.88°41'E., 38.46 chs.
- Land mountainous, very rough.
Soil, on first 4.00 chs. is red clay with a subsoil of white clay; 3rd rate. Balance of mile is black loam with a white clay subsoil; 2nd rate.
- Timber on entire mile is cedar and pinon pine.
Undergrowth, sage brush, service berry, oak, and buck brush.
Good grass for grazing.
- Mountainous or heavily timbered land, 73.46 chs.

August 20, 1910.

John R. Stewart
Instrumentman G.I.D.

Retracement South bdy. T.34 S., R.8 W.

Chains	<p>Survey commenced August 13, 1910, and executed with a Young and Sons light mountain transit, No. 7382, with solar attachment. The horizontal limb is provided with two double verniers placed opposite to each other, reading to single minutes of arc; which is also the least count of the latitude and declination arcs.</p> <p>The instrument was examined, tested on the meridian at Salt Lake City, Utah, found correct, and was approved by the surveyor general for Utah, on August 6, 1910.</p> <p>I examine the adjustments of the instrument and correct the level and collimation errors.</p> <p>Note: I could not make complete test of instrument at this time without the loss of considerable time; therefore see notes of Subdivision of Tp.34 S., R.8 W., for complete test of instrument.</p> <p>At the cor. of Tps.34 and 35 S., R.8 W.; Latitude $37^{\circ}48'37''$ N., longitude $112^{\circ}46'22''$ W., I set off $37^{\circ}49'N.$, on the lat. arc; $14^{\circ}52'N.$, on the decl. arc; and at 7 h 5 m a.m., l.m.t., I determine a meridian with the solar.</p> <p>From the cor. of Tps.34 and 35 S., R.8 W., heretofore described.</p> <p>I run</p> <p>S.$89^{\circ}40'E.$, on a retracement line bet. secs. 6 and 31.</p>
54.00	Intersect the sec. cor., bet. secs. 6 and 31, which is a sandstone, 10x8x6 ins., above ground, firmly set, and mkd. and witnessed as described by the surveyor general.
74.00	Intersect the cor. of secs. 5, 6, 31, and 32, which is a sandstone, 8x8x6 ins. above ground, firmly set, and mkd. and witnessed as described by the surveyor general.
	The course of this line is therefore S. $89^{\circ}40'E.$, 74.00 chs.

No change in topography from original notes.

August 13, 1910.

Juniby Stewart
Instrumentman G.L.O.

-13-

Boundaries of T.34 S., R.8 W.Latitudes, Departures, and Closing Errors.

Line Designated	Course	Distance	Latitudes	Departures.		
			N. chs.	S. chs.	E. chs.	W. chs.
W.bdy.T.34 S.R.8 W.	N. 00°20'E.	152.90	152.90	.....	.89	.....
W.bdy.T.34 S.R.8 W.	N. 0°11'W.	80.05	80.05	.....	.....	.26
W.bdy.T.34 S.R.8 W.	N. 0°03'W.	79.82	79.82	.....	.....	.07
N.Sec.18 Sub.T.34 S. R.8 W.	N. 89°44'E.	80.34	.37	.....	80.34	.....
W.bdy.Sec.8,Sub.T. 34 S.R.8 W.	N. 0°49'W.	39.77	39.77	.....	.....	.57
W.bdy.Sec.8,Sub.T. 34 S.R.8 W.	N. 2°27'E.	40.11	40.07	.....	1.71	.....
N.bdy.Sec.8,Sub.T. 34 S.R.8 W.	S. 88°34'E.	39.88	.....	.1.00	39.87	.....
N.bdy.Sec.8,Sub.T. 34 S.R.8 W.	East	40.55	.....	.....	40.55	.....
W.bdy.Sec.4, Sub. T.34 S.R.8 W.	N. 0°01'E.	80.90	80.90	.....	.....	.02
N.bdy.T.34 S.R.8 W.	S. 89°53'E.	40.41	.....	.08	40.41	.....
N.bdy.T.34 S.R.8 W.	N. 89°E.	39.94	.70	.....	39.93	.....
N.bdy.T.34 S.R.8 W.	S. 89°54'E.	40/10	.....	.07	40.10	.....
N.bdy.T.34 S.R.8 W.	N. 85°49'E.	41.51	3.03	.....	41.40	.....
N.bdy.T.34 S.R.8 W.	S. 89°15'E.	35.00	.....	.46	35.00	.....
N.bdy.T.34 S.R.8 W.	S. 88°41'E.	38.46	.....	.88	38.45	.....
E.bdy.Sec.2 Sub.T. 34 S.R.8 W.	South	39.80	.....	39.80	.....	.....
E.bdy.sec.2,Sub.T. 34 S.R.8 W.	S. 8°56'W.	37125	.....	36.80	.....	5.78
E.bdy.Sec.11,Sub.T. 34 S.R.8 W.	S. 0°03'E.	80.30	.....	80.30	.07	.....
S.bdy.Sec.11,Sub.T. 34 S.R.8 W.	S. 89°50'W.	79.66	.....	.23	.....	79.66
E.bdy.Sec.15,Sub.T. 34 S.R.8 W.	S. 0°12'W.	79.58	.....	79.58	.....	.28
S.bdy.Sec.15,Sub.T. 34 S.R.8 W.	S. 89°45'W.	79.40	.....	.35	.....	79.40
E.bdy.Sec.21,Sub.T. 34 S.R.8 W.	S. 0°30'E.	39.60	.....	39.60	.35	.....
E.bdy.Sec.21,Sub.T. 34 S.R.8 W.	S. 1°20'W.	40.16	.....	40.15	.....	.93
E.bdy.Sec.28,Sub.T. 34 S.R.8 W.	S. 0°10'E.	80.22	.....	80.22	.23	.....
E.bdy.Sec.33,Sub.T. 34 S.R.8 W.	S. 0°08'E.	80.28	.....	80.28	.19	.....
S.bdy.T.34 S.R.8 W.	N. 89°40'W.	234.00	1.36	.....	.....	234.00
Convergency					.31	
	T o t a l s		478.97	479.80	399.82	400.95
					478.97	399.82
Error in lat.					.83	
Error in dep.						1.13

*John R Stewart
Gumby Stewart
Instrumentmen G.L.O.*

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Page

FINAL OATHS OF DEPUTY SURVEYOR AND HIS ASSISTANTS.

LIST OF NAMES.

A list of the names of the individuals employed by Quinby Stewart Instrumentman
G.L.O., ~~Executive Surveyor~~, to assist in running, measuring, and
marking the lines and corners described in the foregoing field notes of the survey of Retracement
fractional South bdy. T. 34 S., R. 8 W. S.L.B. & H., Utah.
showing the respective capacities in which they acted:

Vernon O. Nelson, Chairman.
Ruban W. Riley, Chairman.
Nicholas L. Sheffield, Moundman.
Isaac R. Hayes, Axman.
Flagman.

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted Quinby Stewart, Instrumentman G.L.O.,
Kenneth Staxton Dep't of Surveyor, in surveying all
those parts or portions of the Retracement Fractional South bdv. T. 34 S. R. 8 W.

..... of the Salt
..... Lake Base and meridian, State of Utah, which are represented
in the foregoing field notes as having been surveyed by him and under his direction; and that said survey
has been in all respects, to the best of our knowledge and belief, well and faithfully surveyed, and the
corner monuments established, according to the instructions furnished by the United States Surveyor
General for Utah

General for Union
Vernon O. Nelson, Chairman.
Rybans W. Boley, Chairman.
Nicholas H. Field, Moundman.
Isaac R. Hayes, Axman.
, Axman.
Flagman.

Subscribed and sworn to before me this 2nd }
day of September 1910. }

Jimmy Stewart



BOOK A-324

FINAL OATH OF UNITED STATES DEPUTY SURVEYOR.

I, Quinby Stewart, United States Deputy Surveyor, do
solemnly swear that, in pursuance of a ~~com~~ contract received from Thomas Hull,
United States Surveyor General for U. t. a. h., bearing date of the
6 day of August, 1910, I have well, faithfully, and truly, in my own
person, and in strict conformity with the instructions furnished by the United States Surveyor
General for U. t. a. h., the Manual of Surveying Instructions, and the laws of the
United States, surveyed all those parts or portions of retracement of fractional South
Boundary of Township No. 34 South, Range No. 8 West.

of the Salt Lake
Base and meridian, in the State of Utah, which are represented in the
foregoing field notes as having been surveyed by me, and under my direction; and I do further solemnly
swear that all the corners of said survey have been established and perpetuated in strict accordance with
the Manual of Surveying Instructions, and the special written instructions of the United States Surveyor
General for U. t. a. h. and in the specific manner described in the field notes, and that
the foregoing are the original field notes of such survey.

Quinby Stewart
United States Deputy Surveyor.
United States Transitman.

scribed by said Quinby Stewart, and sworn to before me
this 4 day of June, 1912., 19XX

Thomas Hull
U.S. Surveyor-General

for Utah.

APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

, 190

The foregoing field notes of the survey of

presented by,
under his contract No., dated ..., 190 , having been
critically examined, and the necessary corrections and explanations made, the said field notes, and the
surveys they describe, are hereby approved.

United States Surveyor General.

I certify that the foregoing transcript of the field notes of the above-described surveys in,
has been correctly copied from the original notes on file in this office.

United States Surveyor General.

FINAL OATHS OF DEPUTY SURVEYOR AND HIS ASSISTANTS.

LIST OF NAMES.

A list of the names of the individuals employed by John R. Stewart, Instrumentman G. L. O., XXXXXXXXXxpxxxSxxxxx, to assist in running, measuring, and marking the lines and corners described in the foregoing field notes of the survey of Retracement fractional..., North, and West bdy's. T. 34 S., R. 8 W. S. L. R. & M. Utah showing the respective capacities in which they acted:

Frank S. Allen, Chainman.
 R. Bert Carter, Chainman.
 Harvey W. Elliott, Moundman.
 Alton Ivie, Axman.
 , Axman.
 , Flagman.

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted John R. Stewart, Instrumetnman G. L. O., XXXXXXXXXXxpxxxSxxxxx, in surveying all those parts or portions of the Retracement Fractional..., North, and West bdy's. T. 34 S., R. 8 W.

of the Salt Lake Base and meridian, State of Utah, which are represented in the foregoing field notes as having been surveyed by him and under his direction; and that said survey has been in all respects, to the best of our knowledge and belief, well and faithfully surveyed, and the corner monuments established, according to the instructions furnished by the United States Surveyor General for Utah.

Frank S. Allen, Chainman.
 R. Bert Carter, Chainman.
 Harvey W. Elliott, Moundman.
 Alton Ivie, Axman.
 , Axman.
 , Flagman.

Subscribed and sworn to before me this 2nd
day of September, 1910.

cccccc
S SEAL S
cccccc

John R. Stewart
Instrumentman G. L. O.

FINAL OATH OF UNITED STATES DEPUTY SURVEYOR.

I, John R. Stewart, United States ~~Transitman~~, do solemnly swear that, in pursuance of ~~a contract~~ special instructions received from Thomas Hull of the United States Surveyor General for Utah, bearing date of the 6th day of August, 1910, I have well, faithfully, and truly, in my own proper person, and in strict conformity with the instructions furnished by the United States Surveyor General for Utah, the Manual of Surveying Instructions, and the laws of the United States, surveyed all those parts or portions of the retracement of fractional North and West boundaries of Township No. 34 South, Range No. 8 West, and of the Salt Lake Base and meridian, in the State of Utah, which are represented in the foregoing field notes as having been surveyed by me, and under my direction; and I do further solemnly swear that all the corners of said survey have been established and perpetuated in strict accordance with the Manual of Surveying Instructions, and the special written instructions of the United States Surveyor General for Utah, and in the specific manner described in the field notes, and that the foregoing are the original field notes of such survey.

John R. Stewart
U.S. Deputy Surveyor
U.S. Transitman.

Subscribed by said John R. Stewart, and sworn to before me this 6th day of April, 1912,



Thomas Hull
U.S. Surveyor-General
for Utah.

APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Salt Lake City, Utah, January 7, 1912.

The foregoing field notes of the ~~Surveyor~~ retracement of the South, North, and East Boundaries of Township No. 34 South, Range No. 8 West of the Salt Lake Base and Meridian, Utah,

executed by John R. Stewart and Quinby Stewart under their special instructions, dated August 6, 1910, ~~XXX~~, having been critically examined, and the necessary corrections and explanations made, the said field notes, and the surveys they describe, are hereby approved.

Thomas Hull
United States Surveyor General.

I certify that the foregoing transcript of the field notes of the above-described surveys in _____, has been correctly copied from the original notes on file in this office.

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4-679.

BOOK A-384

B.

FILED

FEB 14 1911

FIELD NOTES

R.S.B.

OF THE SURVEY OF THE

Subdivision

of

Township No. 34 South, Range No. 8 West.

Of the Salt Lake Base and Meridian,

State of Utah.

AS SURVEYED BY

Transitmen.

John R. Stewart and Quinby Stewart, United States Deputy Surveyor.

Assignment Group
Under his Contract No. 1, dated August 6, 1910, #22

Survey commenced August 16, 1910, #20

Survey completed September 2, 1910., #20

6-161

Vlts. and 11-77-80
Jabs 28-15-65

Lining 66.72

NAMES AND DUTIES OF ASSISTANTS.

Frank S. Allen Chainman.

R. Bert Carter Chainman.

Harvey W. Elliott Moundmen.

Alton Ivie Axman.

Verne O. Nelson Chainman.

Ruban W. Riley Chainman.

Nicholas L. Sheffield, Moundmen.

Isaac R. Hayes, Axman.

BOOK A-384

INDEX DIAGRAM.

Township 34 South, Range 8 West

6	5	7	4	43	3	27	2	17	1
	5		60		39		24		
7	4	8	31	9	41	10	26	11	19
1		29		58		36		20	
18	35	17	56	16	38	15	8	14	13
32		54		53		10			
19	73	20	51	21	11	22		23	24
71		70		50					
80	68	20	43	28	13	27		26	25
66		64		46					
81	62	82	44	83	15	84		35	36

Meanders Page

PRELIMINARY OATHS OF ASSISTANTS.

WE, Frank S. Allen and R. Bert Carter

do solemnly swear that we will well and faithfully execute the duties of chainmen; that we will level the chain upon even and uneven ground, and plumb the tally pins, either by sticking or dropping the same; that we will report the true distances to all notable objects, and the true lengths of all lines that we assist in measuring, to the best of our skill and ability, and in accordance with instructions given us, in the survey of

Subdivision of T.34 S., R.8 W. S.L.B. & M., Utah.

Frank S. Allen, Chainman
R. Bert Carter, Chainman

Subscribed and sworn to before me this 13th

day of August, 1910



WE, I. Harvey W. Elliott

xxx

do solemnly swear that we will well and truly perform the duties of moundman in the establishment of corners, according to the instructions given us, to the best of our skill and ability, in the survey of

Subdivision T.34 S., R.8 W. S.L.B. & M., Utah.

Harvey W. Elliott, Moundman

, Moundman

Subscribed and sworn to before me this 13th

day of August, 1910



WE, I. Alton Ivie

xxx

do solemnly swear that we will well and truly perform the duties of axman in the establishment of corners and other duties, according to instructions given us, to the best of our skill and ability, in the survey of

Subdivision T.34 S., R.8 W. S.L.B. & M., Utah.

Alton Ivie

, Axman

, Axman

Subscribed and sworn to before me this 13th

day of August, 1910



John T. Mitchell, Notary Public
my commission exp're June 13/10

I, John T. Mitchell, do solemnly swear that I will well and truly perform the duties of flagman according to instructions given me, to the best of my skill and ability, in the survey of

, Flagman

Subscribed and sworn to before me this 13th

day of August, 1910



BOOK A-384

INDEX DIAGRAM.

Township _____, *Range* _____

6	5	4	3	2	1
7	8	9	10	11	12
16	17	10	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36

Meanders Page _____

PRELIMINARY OATHS OF ASSISTANTS.

We, Verne O. Nelson and Ruban W. Riley

do solemnly swear that we will well and faithfully execute the duties of chainmen; that we will level the chain upon even and uneven ground, and plumb the tally pins, either by sticking or dropping the same; that we will report the true distances to all notable objects, and the true lengths of all lines that we assist in measuring, to the best of our skill and ability, and in accordance with instructions given us, in the survey of

Subdivision T. 34 S., R. 8 W. S. L. B. & M., Utah.

Verne O. Nelson, Chainman
Ruban W. Riley, Chainman

Subscribed and sworn to before me this 13th-

day of August, 1910 } {



We, I, Nicholas L. Sheffield

Xxxdx

do solemnly swear that we will well and truly perform the duties of moundman in the establishment of corners, according to the instructions given us, to the best of our skill and ability, in the survey of

Subdivision T. 34 S., R. 8 W. S. L. B. & M., Utah.

Nicholas L. Sheffield, Moundman
John T. Mitchell, Moundman

Subscribed and sworn to before me this 13th-

day of August, 1910 } {



We, I, Isaac R. Hayes

Xxxd

do solemnly swear that we will well and truly perform the duties of axman in the establishment of corner and other duties, according to instructions given us, to the best of our skill and ability, in the survey of

Subdivision T. 34 S., R. 8 W. S. L. B. & M., Utah.

Isaac R. Hayes, Axman
John T. Mitchell, Axman

Subscribed and sworn to before me this 13th-

day of August, 1910 } {



John T. Mitchell
my son Notary Public
Expir June 13, 1813.

I, do solemnly swear that I will well and truly perform the duties of flagman according to instructions given me, to the best of my skill and ability, in the survey of

, Flagman

Subscribed and sworn to before me this

day of , 190 }



Retracement Subdivision T. 34 S., E. 5 W.

Chains

Survey commenced August 16, 1910, and executed with a Gurley Explorer's transit, No. 957, with solar attachment. The horizontal limb is provided with two double verniers placed opposite to each other, reading to single minutes of arc which is also the least count of the verniers of the latitude and declination arcs.

The instrument was examined, tested on the meridian at Salt Lake City, found correct, and was approved by the surveyor general for Utah, on August 6, 1910.

I examine the adjustments of the instrument and correct the level and collimation errors; then, to test the solar apparatus by comparing its indications resulting from solar observations made during p.m. and a.m. hours, with a meridian established by Polaris observations, I proceed as follows:

At the cor. of secs. 7, 12, 13, and 18, on W.bdy.of Tp., lat. $37^{\circ}52'07''$ N., longitude $112^{\circ}46'22''$ W., I set off $37^{\circ}52'N.$, on the lat.arc; $13^{\circ}49'N.$, on decl.arc; and at 5h 4m p.m., l.m.t., I determine a meridian with the solar, and mark a point thereof on a stone, firmly set in the ground, 5.00 chs. N. of the cor. At 9h 53.7m p.m., l.m.t., I observe Polaris at eastern elongation in accordance with the manual and mark a point thereof on a wooden plug set in the ground, 5.00 chs. N. of the cor.

August 16, 1910.

August 17, 1910: At 6h 30m a.m., l.m.t., I lay off the azimuth of Polaris $1^{\circ}29.4'$ to the west and mark a point in the meridian thus determined by cutting a small groove in the stone already set 5.00 chs. N. of the cor.; this mark falls 0.31 ins. east of the meridian established by the solar.

At 7h 4m a.m., l.m.t., I set off $37^{\circ}52'N.$, on the lat. arc; $13^{\circ}37'N.$, on the decl. arc; and mark the meridian

Retracement Subdivision T.34 S., R. 8 W. - Continued

Chains

determined with the solar, by a cross on the stone already set, 5.00 chs. North of the cor; this mark falls 0.36 ins. east of the meridian determined by Polaris observation. The solar apparatus by p.m. and a.m. observations defines positions for meridians respectively about 0'16" west and 0'14" east of the meridian established by Polaris observation; therefore I conclude that the adjustments of the transit are satisfactory.

The magnetic bearing of the meridian, at 7h 30m a.m., is N.15°50'W.; the angle thus determined gives the mag. decl. 15°50'E.

Note: Before commencing the subdivision of this township I proceed to retrace the lines adjacent to my work. From the cor. of secs. 7, 12, 13, and 18, on W.bdy. of Tp., heretofore described.

I run

N.89°51'E. on a retracement line bet. secs. 7 and 18.

Over nearly level valley; through dense sagebrush.

Asc. gradually.

- 3.80 Parowan-Paragonah telephone line, bears N.55°E. and S.55°W.
- 4.60 County road, from Parowan to Paragonah, bears NE and SW.
- 6.15 Parowan-Paragonah Power transmission line, bears NE and SW.
- 14.95 County road, bears NE and SW.
- 40.27 Fall 9 lbs. S.of the $\frac{1}{4}$ sec.cor.bet.secs. 7 and 18, which is a volcanic rock, 12x8x5 ins., above ground, firmly set, and mfd. and witnessed as described by the surveyor general.
- 53.00 Road, bears N.70°E. and S.70°W.
- 70.00 Leave valley, bears NE and SW.
Enter scattering cedar and pinon pine timber, bears NE and SW.
Asc. rocky north slope of ridge.

Retracement Subdivision T.34 S., R. 8 W. - Continued.

Chains
80.34

Fall 16 lks.S.of the cor.of secs.7,8,17, and 18, which is a volcanic stone, 14x8x5 ins., above ground, firmly set, and mkd. and witnessed as described by the surveyor general.

I destroy the old cor. and re-establish it in the same place as follows:

Set an iron post, 3 ft. long, 2 ins. in dia., 16 ins. in the ground, on solid rock, and surrounded with mound of earth and stone, for cor.of secs.7,8,17, and 18,mkd.on brass cap

T 34 S S 7 in NW.

R 8 W S 8 in NE.

S 17 in SE.; and

S 18 in SW. quadrants; from which

A pinon pine, 10 ins.dia., bears N.40°E., 106 lks.
dist., mkd. T 34 S R 8 W S 8 B T.

A cedar, 10 ins.dia., bears S.14°E., 62 lks.
dist., mkd. T 34 S R 8 W S 17 B T.

A pinon pine, 12 ins.dia., bears S.36°W., 148 lks.
dist., mkd T 34 S R 8 W S 18 B T.

A pinon pine, 12 ins.dia., bears N.24°W., 53 lks.
dist., mkd. T 34 S R 8 W S 7 B T.

The course of this mile is therefore N. 89°42'E., 80.34 chs.

Land, on west 70.00 chs. is nearly level valley gently sloping to the west; would make good dry farms. The east 10.34 chs. is on North slope of mountain; steep and rocky and not valuable even for grazing.

Soil, on west 70.00 chs. is clay and sandy loam; 2nd rate.
Subsoil, clay.

Timber, cedar and pinon pine on east 10.34 chs.

Undergrowth, sagebrush and rabbit brush on entire mile.

Mountainous land, or land covered with dense undergrowth, 80.34 chs.

August 17,1910: At this cor.I set off 13°32'N. on the decl. arc; and at 0h 4m p.m.,l.m.t.,I observe the sun on the

Retracement Subdivision T. 34 S., R. 8 W. - Continued.

Chains

meridian; the resulting lat. is $37^{\circ}52'N.$, which is the proper lat. nearly.

North, on retracement line bet. secs. 7 and 8.

Over mountainous land; through heavy cedar and pinon pine timber.

Desc. over volcanic rocks.

5.00 Leave rocks, bears NE. and SW.

13.50 Foot of descent, 125 ft. below sec.cor., bears NE and SW.

Leave timber and enter dense sagebrush, bears NE and SW.

Enter Parowan Valley, bears NE and SW.

24.40 Wood road, bears $N.20^{\circ}E.$ and $S.20^{\circ}W.$

39.77 Fall 57 lks.E.of the $\frac{1}{4}$ sec.cor.betsecs.7 and 8, which is a red sandstone, $12 \times 6 \times 4$ ins., above ground, firmly set, and mkd. and witnessed as described by the surveyor general.

The cor. is poorly mkd.; therefore I destroy it and re-establish it in the same place as follows:

Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for $\frac{1}{4}$ sec.cor., mkd. on brass cap $\frac{1}{4}$ S 7 in W. half and S 8 in E. half; and raise a mound of stone, 3 ft. base $1\frac{1}{2}$ ft. high, W. of cor.

67.00 County road from Parowan to Paragonah, bears $N.20^{\circ}E.$ and $S.20^{\circ}W.$

70.00 Parowan-Paragonah Power transmission line, bears NE. and SW.

77.40 County road, from Parowan to Paragonah, bears NE. and SW.

78.55 Parowan-Paragonah telephone line, bears NE. and SW.
78.70 Post and wire fence bears E. and W.

79.84 Fall 114 lks. West of the cor. of secs. 5, 6, 7, and 8, which is a volcanic stone, $6 \times 6 \times 4$ ins. above ground, firmly set, and mkd. and witnessed as described by the surveyor general.

The corner stone is poorly marked; therefore I destroy it and re-establish it at the same place as follows:

Retracement Subdivision T.34 S., R.8 W.-Continued.

Chains

Set an iron post 3 ft. long, 2 ins. in dia., 24 ins. in the ground, for cor. of secs. 5, 6, 7 and 8, marked on brass cap

T 34 S S 6 in NW.

R 8 W S 5 in NE.

S 8 in SE., and

S 7 in SW. quadrant; dig pits 18 x 18 x 12 ins. in each sec. $5\frac{1}{2}$ ft. dist.; and raise a mound of earth 4 ft. base, 2 ft. high W. of cor.

The course of the south half of this mile is therefore N. $0^{\circ}49'W.$ 39.77 chs., and the north half is N. $29'27'E.$ 40.11 chs.

Land, on S. 13.50 chs. is mountainous, sloping northward into Parowan Valley; on north 66.34 chs. land is nearly level valley and with gentle slope to the northwest.

Soil on south 13.50 chs. is rocky and gravelly; 4th rate. On the north 66.38 chs. the soil is sandy and clay loam, 2d rate, with subsoil of white clay.

Timber, cedar and pinon pine on S. 13.50 chs.

Undergrowth, sagebrush and greasewood on N. 66.38 chs.

The south 13.50 chs. cannot be cultivated at all. The north 66.38 chs. can be cultivated, but has a number of stony streaks running through it.

Mountainous or heavily timbered land, or land covered with dense undergrowth 79.88 chs.

August 17, 1910.

August 18: At 7h 4m a.m., l.m.t., I set off $37^{\circ}53'N.$ on the lat.arc; $13^{\circ}8'W.$ on the decl.arc; and determine a meridian with the solar at the cor. of secs. 5, 6, 7 and 8. Thence I run

East, on a retracement line bet. secs. 5 and 8,

Retracement Subdivision T.34 S., R.8 W.- Continued.

Chains

Over level valley along wire fence, bearing NE. and W.

1.35 County road from Parowan to Paragonah, bears NE. and SW.

2.50 Parowan-Paragonah power transmission line bears NE. and SW.

3.50 Road, bears NE. and SW.

37.50 Wood road, bears NE. and SW.

39.35 Fall 100 lks.N. of the $\frac{1}{4}$ sec.cor.betsecs.5 and 8, which is a white sandstone 6 x 10 x 6 ins.above ground,firmlly set and marked and witnessed as described by the surveyor general. The corner stone and the bearing trees are decaying; therefore I destroy the old cor. and re-establish it in the same place as follows:

Set an iron post 3 ft.long,1 in.in dia.,26 ins.in the ground,for $\frac{1}{4}$ sec.cor.,marked on brass cap $\frac{1}{4}$ S 5 in N.half, S 8 in S.half; and raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft.high N. of cor.

43.00 Leave valley bears NE. and SW.

50.00 Bottom of hollow, course NW.

60.00 Top of ridge, bears NW. and SE. Descend.

73.35 Wash, course NW.

80.42 Fall 100 lks.N.of the cor. of secs.4,5,8 and 9, which is a volcanic stone 6 x 13 x 8 ins.above ground, firmly set and mkd. and witnessed as described by the surveyor general. I proceed to replace the old cor. with an iron post and mark two new trees as follows:

Set an iron post 3 ft. long, 2 ins.dia.,24 ins.in the ground,for cor.of secs.4,5,8 and 9, mkd.on brass cap T 34 S 3 S in NW.

R 8 W S 4 in NE.

S 9 in SE.; and

S 8 in SW. quadrant; from which

A cedar 5 ins.dia.bears S.58°30'E. 131 lks.dist.,
mkd. T 34 S R 8 W S 9 E T

A cedar 6 ins.dia. bears S.34°30'W. 76 lks.dist.,

Retracement Subdivision T.34 S., R.8 W.- Continued.

Chains	<p style="text-align: center;">mkd. T 34 S R 8 W S 8 B T</p> <p>The course of the west half of this mile is therefore S.$88^{\circ}34' E.$ 39.88 chs.; the east half is east 40.55 chs. Land on west 43.00 chs. is nearly level valley sloping gently to the west. The east 37.43 chs. is mountainous land sloping west and southwest; soil red clay, poor, and about 8 ins. deep on gravel and rock subsoil. Some scattering cedar and pinon pine timber. Sagebrush on entire mile.</p> <p>August 18, 1910: At this cor. I set off $13^{\circ}13' N.$ on the decl. arc; and at 0 h 4 m p.m., l.m.t., I observe the sun on the meridian; the resulting lat. is $37^{\circ}53' N.$, which is the proper lat. nearly.</p> <hr/>
	<p>North, on retracement line bet. secs. 4 and 5, Over mountainous land; through scattering cedar and pinon pine timber and dense sagebrush and greasewood. Asc.</p>
5.00	<p>Top of flat ridge, 100 ft. above sec.cor., bears E. and W. Desc. gradually.</p>
40.30	<p>Fall 1 lk. W. of the $\frac{1}{4}$ sec.cor. bet. secs. 4 and 5., which is a volcanic stone, 5 x 10 x 10 ins. above ground, firmly set, and mkd. and witnessed as described by the surveyor general. The stone is poorly mkd. therefore I replace it with an iron post as follows:</p> <p>Set an iron post, 3 ft. long, 1 in. in dia., 14 ins. in the ground, on solid rock, and surrounded by mound of stone, for $\frac{1}{4}$ sec.cor., mkd. on brass cap $\frac{1}{4}$ S 5 in N. half and S 4 in E. half; and raise a mound of stone, 2 ft. base. $1\frac{1}{2}$ ft. high, W. of cor.</p>
72.70	<p>Foot of descent, enter valley, bears NE. and SW.</p>
80.90	<p>Fall 2 lks. W. of the cor. of secs. 4, 5, 32 and 33, on N. bdy. of Tp., heretofore described.</p>
	<p>The course of this line is therefore N.$0^{\circ}1'E.$, 80.90 chs.</p>

Retracement Subdivision T.34 S., R.8 W.-Continued.

Chains

S.72.70 chs. over ridge bearing east and west and sloping north and south. Soil rich loam mixed with black volcanic rocks, more rocks than soil; a few scattering cedars and pinon pines and a dense growth of sagebrush. N.8.20 chs. nearly level valley, gentle north slope, Soil rich clay and sandy loam, a little gravel, soil 18 ins. to 2 ft. deep, on subsoil of clay; undergrowth, sagebrush and greasewood. No timber.

August 18, 1910

August 22, 1910: At 7 h 3 m a.m., l.m.t., I set off $37^{\circ}52'N.$ on the lat.arc; $12^{\circ}00'N.$ on the decl.arc; and determine a meridian with the solar at the cor. of secs.10,11,14 and 15, described on page 21, this book.

Thence I run

South on a retracement line bet.secs.14 and 15.
Over mountainous land; through dense mahogany and oak undergrowth and scattering cedar and pinon pine timber.

Asc.

10.00 Top of ridge, 100 ft. above sec.cor., bears E. and W.
Desc.

10.50 Enter heavy cedar and pinon pine timber, bears E. and W.
Leave mahogany and oak brush, bears E. and W.
24.00 Bottom of hollow, 300 ft. below ridge, course SW.

Asc.

30.50 Top of spur, 100 ft. above hollow, bears E. and W.
Desc.

37.10 Hollow, 150 ft. below spur, course $N.50^{\circ}W.$
Leave timber, bears $N.50^{\circ}W.$ and $S.50^{\circ}E.$
Enter dense oak, maple, and mahogany brush, bears $N.50^{\circ}W.$ and $S.50^{\circ}E.$
Asc.

Retracement Subdivision T.34 S., R.8 W.-Continued.

Chains	
58.91	Fall 14 lks.E.of the $\frac{1}{4}$ sec.cor.betsecs.14 and 15,which is a granite stone,9x8x6 ins.,above ground,firmlly set, and mkd.and witnessed as described by the surveyor general;The stone is decaying therefore I destroy it and re-establish the cor.in the same place as follows: Set an iron post,3 ft.long,1 in.in dia.,26 ins.in the ground,for $\frac{1}{4}$ sec.cor..mkd.on brass cap $\frac{1}{4}$ S 15 in W half; and S 14 in E half;and raise a mound of stone,2 ft.base, $1\frac{1}{2}$ ft.high,W.of cor.
69.00	Top of ridge,350 ft.above hollow,bears E.and W.
	Desc..
79.58	Fall 28 lks.E.of the cor.of secs.14,15,22, and 23,which is a granite stone,7x12x6 ins.,above ground,firmlly set, and mkd.and witnessed as described by the surveyor general.I destroy the old cor.and re-establish it in the same place as follows: Set an iron post,3 ft.long,2 ins.in dia.,24 ins.in the ground,for cor.of secs.14,15,22, and 23,mkd.on brass cap T 34 S S 15 in NW. R 8 W S 14 in NE. E 23 in SE.;and S 22 in SW.quadrants;from which A mahogany,8 ins.dia.,bears N.65°E.,29 lks. dist..mkd.T 34 S R 8 W S 14 B T. A pinon pine,10 ins.dia.,bears S.45°E.,19 lks. dist..mkd.T 34 S R 8 W S 23 B T. A red cedar,10 ins.dia.,bears N.75°30'W.,22 lks. dist..mkd.T 34 S R 8 W S 15 B T. No other trees within limits;raise a mound of stone,2 ft. base, $1\frac{1}{2}$ ft.high,W.of cor. The course of this mile is therefore S.0°12'W.,79158 chs. The entire mile is composed of high ridges and deep hollows,draining northwesterly toward Parowan valley.The soil is a rich black loam 8 to 10 ins.deep,mixed with

Retracement Subdivision T.34 S., R.8 W.-Continued.

Chains	gravel, subsoil is gravel and clay; Timber, cedar and pinon pine; undergrowth, oak, maple and mahogany; good grass for grazing.
	August 22, 1910.
	August 23, 1910: At 7 h 3 m a.m., l.m.t., I set off $37^{\circ}51'N.$, on the lat.arc; $11^{\circ}40'W.$, on the decl.arc; and determine a meridian, with the solar, at the cor.of secs.14, 15, 22, and 23. Thence I run $N.89^{\circ}53'W.$, on a retracement line betsecs.15 and 22. Over mountainous land; through heavy timber and dense undergrowth.
Desc.	
16.00	Begin more gradual descent, bears $N.60^{\circ}W.$ and $S.60^{\circ}E.$
39.66	Fall 25 lks.N.of the $\frac{1}{4}$ sec.cor.betsecs.15 and 22, which is a volcanic stone, $5 \times 12 \times 6$ ins., above ground, firmly set, and mkd.and witnessed as described by the surveyor general. The cor.stone is decaying therefore I destroy it and re-establish it in the same place as follows: Set an iron post, 3 ft.long, 1 in.in dia., 26 ins.in the ground, for $\frac{1}{4}$ sec.cor..mkd. $\frac{1}{4} S 15$ in N half; and $S 22$ in S half; from which
	A pinon pine, 8 ins.dia., bears $N.22^{\circ}W.$, 40 lks. dist..mkd. $\frac{1}{4} S 15$ B T.
	A pinon pine, 8 ins.dia., bears $S.45^{\circ}W.$, 48 lks. dist..mkd. $\frac{1}{4} S 22$ B T.
48.50	Wash, 30 lks.wide, 10 ft.deep, in bottom of hollow, 50 ft. below $\frac{1}{4}$ sec.cor., course $N.60^{\circ}W.$
Asc.	
60.00	Old road, bears $N.60^{\circ}W.$ and $S.60^{\circ}E.$

Retracement Subdivision T.34 S., R.8 W.-Continued.

Chains	
62.50	Begin abrupt ascent, bears N.60°W. and S.60°E.
72.00	Top of ridge, 300 ft. above hollow, bears N. and S.
	Desc.
79.40	Fall 51 lks.N.of the cor.of secs.15,16,21, and 22, which is a pinon pine, 18 ins.in dia., mkd. and witnessed as described by the surveyor general. The course of this line is therefore S.89°45'W., 79.40 chs. This mile is high mountain ridges and broad flat hollows, general slope to the northwest; dense mahogany and oak b brush predominate in the hollows and cedar and pinon pine timber on the ridges. The soil is a rich moist black loam 6 to 12 ins.deep, subsoil, gravel and rock. produces good grass .
	Mountainous or heavily timbered land, or land covered with dense undergrowth, 79.40 chs.
	August 23, 1910: At this cor. I set off 11°34'N., on the decl. arc; and at 0 h 3 m p.m., l.m.t., I observe the sun on the meridian, the resulting lat. is 37°51'N.; which is the proper lat. nearly.
	<hr/>
	South, on a retracement line bet.secs.21 and 22.
	Over mountainous land; through heavy timber and scattering undergrowth.
	Desc.gradually.
7.00	Head of hollow, 25 ft. below cor., bourse N.60°W.
	Asc.
14.00	Top of ridge, 150 ft. above hollow, bears E. and W.
	Leave heavy and enter scattering timber, bears E. and W.
	Enter dense undergrowth, bears E. and W.
	Desc.
20.00	Enter heavy timber, bears E. and W.
27.00	Bottom of hollow, 200 ft. below ridge, course N.35°W.

Retracement Subdivision T.34 S., R.8 W.-Continued.

Chains

- Leave heavy and enter scattering timber, bears N.35°W. and S. S.35°E.
- Asc.
- 59.60 Fall 55 lks. west of $\frac{1}{4}$ sec.cor. bet. secs. 21 and 22, which is a limestone, 5x10x5 ins., above ground, firmly set, and mkd. and witnessed as described by the surveyor general. I destroy all traces of the old cor. and re-establish it in the same place as follows: Set an iron post, 3 ft. long, 1 in. in dia., 36 ins. in the ground, for $\frac{1}{4}$ sec.cor.. mkd. on brass cap $\frac{1}{4}$ S 21 in W half and S 22 in E half; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.
- 56.00 Top of ridge, 250 ft. above hollow, bears E. and W. Leave timber, bears E. and W. Desc. gradually.
- 65.00 Bottom of swale, 50 ft. below ridge, course W. Asc. gradually.
- 79.75 Fall 59 lks. East of the cor. of secs. 21, 22, 27, and 28, which is a granite stone, 6 x12x6 ins., above ground, firmly set, and mkd. and witnessed as described by the surveyor general. I destroy all traces of the old cor. and re-establish it in the same place as follows: Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground, for cor. of secs. 21, 22, 27, and 28, mkd. on brass cap T 34 S S 21 in NW. R 8 W S 22 in NE. S 27 in SE.; and S 28 in SW. quadrants; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. The course of the north half of this mile is therefore S.0°30'E., 59.60 chs. the south half is S.1°20'W., 40.16 chs. The north 56.00 chs. of this mile is broken and steep, draining west; the soil is red and white clay from 4 to 8 ins. deep, on gravel and rock subsoil. The south 23.76

Retracement Subdivision T.34 S., R.8 W.-Continued.

Chains

chs.is high and rolling;the soil is rich clay loam mixed with some gravel;undergrowth oak and maple with some scattering sage brush;produces good grass .

Mountainous or heavily timbered land,or land covered with dense undergrowth,79.76 chs.

August 23,1910.

August 24,1910:At 7 h 2 m a.m.,l.m.t.,I set off 37°50'N.,on the lat.arc;11°19'N.,on the decl.arc;and determine a meridian with the solar,at the cor.of secs.21,22,27, and 28.

Thence I run

South, on retrace ment line bet.secs.27 and 28

Over mountainous land;through dense oak and sage brush.

Asc.gently.

5.50 Top of flat ridge,25 ft.above sec.cor.,bears E.and W.

Desc.gently.

16.50 Bottom of hollow,50 ft.below ridge,course N.30°W.

Asc.

34.00 Top of ridge,150 ft.above hollow,bears E.and W.

Enter scattering timber,bears E.and W.

Desc.

39.90 Fall 12 lks.West of the $\frac{1}{2}$ sec.cor.,bet.secs.27 and 28 which is a red sandstone,11x8x7 ins.,above ground, firmly set, and mkd.and witnessed as described by the surveyor general.

I destroy the old cor.and re-establish it in the same place as follows:

Set an iron post,3 ft.long,1 in.in dia.,26 ins.in the ground,for $\frac{1}{2}$ sec.cor..mkd.on brass cap $\frac{1}{2}$ S 28 in W half and S 27 in E half;and raise a mound of stone,2 ft.base

Retracement Subdivision of T.34 S., R.8 W.-Continued.

CHAINS

- 1 $\frac{1}{2}$ ft. high, W. of cor.
- 61.00 Enter heavy timber, bears E. and W.
- 68.00 Bottom of canon, 800 ft. below ridge, course S.20°W.
- Asc.
- 73.00 Foot of nearly perpendicular ledges, 300 ft. high, bears N. 20°W. and S.20°E.
- 78.50 Top of ledges, bears N.20°E. and S.20°W.
- 79.50 Top of spur, 400 ft. above canon, bears NE and SW.
- Desc.
- 80.22 Fall 23 lks. W. of the cor. of secs. 27, 28, 33, and 34, which is a sandstone; 6x9x8 ins. above ground, firmly set, and mkd. and witnessed as described by the surveyor general, I destroy the old cor. and re-establish it in the same place as follows:
- Set an iron post, 3 ft. long, 2 ins. dia., 24 ins. in the ground, for cor. of secs. 27, 28, 33, and 34, mkd. on brass cap
- T 34 S 28 in NW.
- R 8 W S 27 in NE.
- S 34 in SE.; and
- S 33 in SW. quadrants; from which
- A pinon pine, 24 ins. in dia., bears N.44°30'E., 42 lks. dist.. mkd. T 34 S R 8 W S 27 B T.
- A pinon pine, 16 ins. dia., bears S.72°30'E., 79 lks. dist.. mkd. T 34 S R 8 W S 34 B T.
- A pinon pine, 11 ins. dia., bears S.43°30'W., 49 lks. dist.. mkd. T 34 S R 8 W S 33 B T.
- A pinon pine, 16 ins. dia., bears N.46°30'W., 92 lks. dist.. mkd. T 34 S R 8 W S 28 B T.
- The course of this mile is therefore S.0°10'E., 80.22 chs. The N.54.00 chs. of this mile is high and rolling, sloping and draining northwesterly; the soil is rich clay loam about 14 ins. deep, on subsoil of gravel; no timber; is covered with a dense undergrowth of oak, sage, and buck brush; Good grass. The south 46.22 chs. is rough, steep, and rocky; soil

Retracement Subdivision ".34 S.R.8 W. Continued.

Chains

has been mostly washed away leaving mostly bare rock. Considerable cedar and pinon pine and red pine timber and oak and mahogany undergrowth. A little grass. Mountainous or heavily timbered land, or land covered with dense undergrowth, 80.22 chs.

August 24, 1910: At the noon hour the sky was overcast and solar observations were impossible.

August 24, 1910.

August 25, 1910: At 7 h 2 m a.m., l.m.t., I set off $37^{\circ}49'N.$ on the lat.arc; $10^{\circ}59'W.$, on the decl.arc; and determine a meridian with the solar, at the cor.of secs.27, 28, 33, and 34.

Thence I run

South, on a retracement line betsecs.33 and 34.

Over mountainous land; through heavy timber and scattering undergrowth.

Desc.

9.00 Bottom of Canon, 200 ft. below sec.cor., course S.60'W.

Asc. over ledges.

29.00 Top of ridge, 700 ft. above canon, bears NE and SW.

Desc. over ledges.

35.50 Head of hollow, 100 ft .below ridge, course NW.

Asc. over ledges.

40.80 Fall 9 lks.west of the $\frac{1}{4}$ sec.cor.betsecs.33 and 34, which is a granite stone, 6x9x6 ins.above ground, firmly set, and mkd.and witnessed as described by the surveyor general, I destroy the old cor.; and re-establish it in the same place as follows:

Set an iron post, 3 ft.long, 1 in.in dia., 26 ins.in the ground, for $\frac{1}{4}$ sec cor.; mkd.on brass cap $\frac{1}{4}$ S 33 in W half

Retracement Subdivision of T.34 S.R.8 W.-Continued.

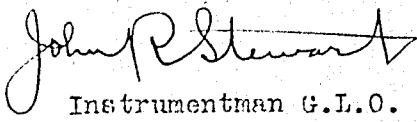
Chains
and and S 34 in 2 half; from which
A cedar, 6 ins. dia., bears N.82°E., 59 lks. dist.
mkd. 4 S 34 S T.
A red pine, 50 ins. dia., bears S.50°W., 90 lks.
dist.. mkd. 4 S 33 S T.

42.50 Top of ridge, 200 ft. above hollow, bears NE and SW.
Desc. abruptly over ledges from 5 ft. to 100 ft. high.

72.00 Bottom of Dry canon, 800 ft. below ridge, course S.60°W.
Asc. abruptly over ledges.

30.28 Fall 19 lks. west of the cor. of secs. 3, 4, 33, and 34, on
S. bdy. of Tp., which is a sandstone, 8x12x6 ins., above
ground, firmly set, and mkd. and witnessed as described,
by the surveyor general.
The course of this line is therefore S.0°08'E., 80.28 chs.
This mile is exceptionally rough; soil is red clay from
1 to 8 ins. deep, on almost solid rock and there are
numerous ledges from 10 ft. to 100 ft. high. Medium heavy
growth of cedar, pinon pine, and red pine timber. And
scattering oak brush.
Mountainous or heavily timbered land, 80.23 chs.
August 25, 1910: At the noon hour the sky was overcast
and solar observations were impossible.

August 25, 1910.



John P. Stewart
Instrumentman G.L.O.

Retracement Subdivision T.34 S., R.8 W.- Continued.

Chains

Survey commenced August 15, 1910, and executed with a Young and Sons light mountain transit No. 7382, with solar attachment. The horizontal limb is provided with two double verniers placed opposite to each other, reading to single minutes of arc; which is also the least count of the latitude and declination arcs.

The instrument was examined, tested on the meridian at Salt Lake City, found correct, and was approved by the surveyor general for Utah, on August 6, 1910.

Note: For complete test of instrument see notes of Sub.T. 34 S., R.8 W.

At the cor. of secs. 1, 2, 35 and 36, on N.bdy.of Tp.described in notes of Retracement N.bdy.T.34 S., R.8 W.latitude $37^{\circ} 53' 51''$ N., longitude $112^{\circ} 40' 53''$ W., I set off $37^{\circ} 54' 1''$ N., on the lat.arc; $14^{\circ} 15'$ N. on the decl.arc; and determine a meridian with the solar, at 7h 4m a.m., l.m.t., Thence I run, for reasons already explained,

S. $0^{\circ} 11' 1''$ W., on a retracement line betsecs. 1 and 2, Over mountainous land; through heavy timber. Desc.over ledges.

5.50 Bottom of hollow, 500 ft. below sec.cor., course W.

Asc. over ledges.

24.85 Foot of sandstone ledge, 100 ft. high,bears E. and W.

25.50 Top of ridge, 250 ft. above hollow, bears E. and W.

Desc. over ledges.

29.80 Fall 13 lks.W.of the $\frac{1}{4}$ sec. cor.,betsecs. 1 and 2,which is a granite stone $7 \times 9 \times 7$ ins.above ground, firmly set, and mkd.and witnessed as described by the surveyor general. I destroy the old cor. and re-establish it at the same point as follows:

Set an iron post 3 ft.long, 1 in.in dia., 26 ins.in the ground, for $\frac{1}{4}$ sec.cor. mkd.on brass cap $\frac{1}{4}$ S 2 in W. half and S 1 in E.half; from which

A cedar 12 ins.dia. bears N. 45° E. 8 lks.dist.,

mkd. $\frac{1}{4}$ S 1 B T.

Retracement Subdivision T.34 S., R.8 W.- Continued.

Chains	A pinon pine, 30 ins. dia., bears S.45°W., 8 lks.dist., mkd. $\frac{1}{4}$ S 2 B T.
72.50	Hoosier Creek, 3 lks.wide, 2 ins.deep, in bottom of canon, 200 ft. below ridge, course N.30°W. Asc. August 15, 1910: At the noon hour the sky is overcast and solar observations are impossible.
76.60	Fall of 5.53 chs. East of the cor. of secs. 1,2,11 and 12, which is a granite stone, 7x8x7 ins. above ground, firmly set, and mkd. and witnessed as described by the surveyor general. I destroy the old cor. and re-establish it at the same point as follows: Set an iron post, 3 ft.long, 3 ins.in dia., 24 ins.in the ground, for cor.of secs.1,2,11 and 12, mkd.on brass cap T 34 S S 2 in NW R 8 W S 1 in NE. S 12 in SE.; and S 11 in SW. quadrants; from which A cedar 12 ins.dia. bears N.88°30'E. 32 lks.dist., mkd. T 34 S R 8 W S 1 B T. A pinon pine, 6 ins.dia. bears S.26°E. 55 lks.dist., mkd. T 34 S R 8 W S 12 B T. A mahogany 15 ins.in dia. bears S.48°W. 45 lks.dist., mkd. T 34 S R 8 W S 11 B T. A white pine 4 ins.dia. bears N.20°W. 91 lks.dist., mkd. T 34 S R 8 W S 2 B T.
	The course of the north half of this mile is therefore South 39.80 chs. and the South half is S.8°56'W. 37.25 chs. Land, mountainous. Soil, red clay; 3d rate and rocky. Subsoil,gravel and rock. Timber, cedar and pinon pine and red and white pine. Mountainous or heavily timbered land, 77.05 chs.

Retracement. Subdivision T.34 S., R.8 W.-Continued.

Chains

August 16, 1910: At 7 h 4 m a.m., l.m.t., I set off $37^{\circ}53'N.$ on the lat.arc; $13^{\circ}56'N.$, on the decl.arc; and determine a meridian with the solar, at the cor.of secs.1,2,11, and 12.

Thence I run

South, on a retracement line bet.secs.11 and 12.

Over Mountainous land; through heavy cedar, pinon pine, red pine, and white pine timber, and oak and mahogany under-growth.

Asc.steep northeast slope of ridge.

35.00 Leave heavy and enter scattering timber, bears E. and W.

40.50 Fall 3 lks.west of the $\frac{1}{4}$ sec.cor.bet.secs.11 and 12, which is a granite stone, $6x7x6$ ins.above ground, firmly set, and mkd.and witnessed as described by the surveyor general. I destroy the old cor.and re-establish it at the same point as follows:

Set an iron post, 3 ft.long, 1 in.in dia., 26 ins.in the ground, for $\frac{1}{4}$ sec.cor..mkd.on brass cap $\frac{1}{4}$ S 11 in W half and S 12 in E half; from which

A cedar, 6 ins.dia., bears $S.22'E.$, 21 lks.

dist..mkd. $\frac{1}{4}$ S 12 B T.

A cedar, 6 ins.dia., bears $S.44'W.$, 35 lks.

dist..mkd. $\frac{1}{4}$ S 11 B T.

43.00 Top of ridge, 600 ft.above sec.cor., bears E. and W.

Desc.

59.50 Bottom of hollow, 300 ft.below ridge, course NE.

Asc.

80.30 Fall 7 lks.W.of the cor.of secs.11,12,13, and 14, which is a granite stone, $6x9x6$ ins., above ground, firmly set, and mkd.and witnessed as described by the surveyor general.

I destroy the old cor.and reestablish it in.the same place as follows:

Retracement Subdivision T.34 S., R.8 W.-Continued.

Chains

Set an iron post, 3 ft. long, 2 in. in dia., 24 ins. in the ground, for cor. of secs. 11, 12, 13, and 14, mkd. on brass cap

T 34 S S 11 in NW.

R 8 W S 12 in NE.

S 13 in SE.; and

S 14 in SW quadrants; and raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.

The course of this mile is therefore S.0°3' E., 80.30 chs. The N. half of this mile is a northeast slope quite steep and covered with timber and undergrowth; the soil is black, damp, loam, 12 to 14 ins. deep. good grass. The south half is high rolling, black soil, medium texture some rocks and gravel. good grass. Not much timber. Considerable undergrowth of oak, mahogany, and sage brush. Mountainous or heavily timbered land, or land covered with dense undergrowth, 80.30 chs.

August 16, 1910: At the noon hour the sky was overcast and solar observations were impossible.

August 16, 1910.

August 17, 1910: At 7 h 4 m a.m., l.m.t., I set off 37°52' N., on the lat. arc; 13°37' N., on the decl. arc; and determine a meridian with the solar, at the cor. of secs. 11, 12, 13, and 14.

Thence I run

N.89°48' W., on a retracement line bet. secs. 11 and 14.

Over mountainous land; through dense undergrowth.

Desc.

6900 Bottom of hollow, 75 ft. below sec. cor., course N.10°E.

Asc.

15.50 Top of ridge, 150 ft. above hollow, bears N. and S.

Retracement Subdivision T.34 S., R.8 W.-Continued.

Chains	
	Desc. gradually.
39.88	Fall 26 lks. N. of the $\frac{1}{4}$ sec. cor. bet. secs. 11 and 14. which is a volcanic stone, 7x14x9 ins. above ground, firmly set, and mkd. and witnessed as described by the surveyor general. The cor. is poorly marked. I destroy all traces of the old cor. and re-establish it in the same place as follows: Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor.. mkd. on brass cap $\frac{1}{4}$ S 11 in N half and S 14 in S half; and raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$ ft. high, N. of cor. August 17, 1910: At this cor. I set off $13^{\circ}32'N.$, on the decl. arc; and at 0 h 4 m p.m., l.m.t., I observe the sun on the meridian, the resulting lat. is $37^{\circ}52'N.$, which is the proper lat. nearly.
40.20	Begin abrupt descent, bears N. and S.
55.00	Bottom of hollow 300 ft. below ridge, course N. $60^{\circ}W.$ Asc.
66.00	Top of spur, 100 ft. above hollow, bears NW. and SE. Desc.
69.50	Bottom of hollow, 150 ft. below ridge, course NW. Asc.
75.00	Top of ridge, 150 ft. above hollow, bears N. and S. Desc.
76.00	Enter dense mahogany brush, bears N. and S.
79.66	Fall 51 lks. N. of the cor. of secs. 10, 11, 14, and 15, which is a granite stone, 10x11x7 ins., above ground, loosely set, and mkd. and witnessed as described by the surveyor general. I destroy the old cor. and re-establish it in the same place as follows: Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground, for cor. of secs. 10, 11, 14, and 15, mkd. on brass cap T 34 S S 10 in NW.

Retracement - Subdivision T.34 S.R.8 W.-Continued.

Chains

R 8 W S 11 in NE.

S 14 in SE.; and

S 15 in SW. quadrants; and raise a mound of stone
2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.

The course of this line is therefore S. $89^{\circ}50'$ W., 79.66
chs.

Land, rolling mountain top, good rich black loam mixed
with gravel; subsoil, gravel and rock. A few scattering cedars and pinon pines. Considerable undergrowth, oak,
sage, and mahogany.

Mountainous land, or land covered with dense undergrowth
79.66 chs.

August 17, 1910.

Dunby Stewart

Instrumentman, G.L.O.

Subdivision of T.34 S., R.8 W.

Survey commenced August 17, 1910, and executed with a Young and Sons light mountain transit, No. 7382, with solar attachment. The horizontal limb is provided with two double verniers placed opposite to each other, reading to single minutes of arc; which is also the least count of the latitude and declination arcs.

The instrument was examined, tested, on the meridian at Salt Lake City, found correct, and was approved by the surveyor general for Utah, on August 6, 1910.

I examine the adjustments of the transit and correct the level and collimation errors; then, to test the solar apparatus by comparing its indications resulting from solar observations made during p.m. and a.m. hours with a meridian established by Polaris observation, I proceed as follows:

At the cor. of secs. 10, 11, 14, and 15, heretofore described latitude $37^{\circ}52'07''$ N., longitude $112^{\circ}41'59''$ W., I set off $37^{\circ}52'$ N., on the lat. arc; $13^{\circ}30'$ N., on the decl. arc; and at 4 h 4 m p.m., l.m.t., I determine a meridian with the solar, and mark a point thereof on a stone firmly set, in the ground, 5.00 chs. N. of the cor.

At 9 h 50 m p.m., l.m.t., I observe Polaris at eastern elongation, in accordance with the Manual, and mark a point in the line thus determined by a tack driven in a wooden plug set in the ground, 5.00 chs. N. of the cor.

August 17, 1910.

August 18, 1910: At 6 h 30 m a.m., l.m.t., I lay off the azimuth of Polaris $1^{\circ}29'$ to the west and mark the meridian thus determined by cutting a small groove in the stone already set 5.00 chs. N. of the cor.; this mark falls 0.38 ins. east of the meridian determined by the solar. At 7 h 4 m a.m., l.m.t., I set off $37^{\circ}52'$ N., on the lat.

Subdivision T.34 S., R.8 W.-Continued.

Chains

arc; $13^{\circ}18'W.$, on the decl.arc; and mark the meridian determined with the solar, by a cross on the stone already set, 5.00 chs.N. of the cor.; this mark falls 0.28 ins. east of the meridian established by Polaris observation.

The solar apparatus by p.m. and a.m. observations defines positions for meridians respectively about $0^{\circ}20'W.$ and $0^{\circ}14'E.$ east of the meridian established by Polaris observation; therefore I conclude that the adjustments of the instrument are satisfactory.

The magnetic bearing of the meridian at 7 h 30 m a.m., l.m.t., is $N.15^{\circ}50'W.$, the angle thus determined gives the mag.decl. $15^{\circ}50'E.$

From the cor.of secs.10,11,14, and 15, heretofore described

I run

North, on random line bet.secs.10 and 11.

40.00 Set temp. $\frac{1}{4}$ sec.cor.

80.00 Set temp.cor.of secs.2,3,10, and 11.

Thence I run

$E.89^{\circ}48'E.$, on a random line bet.secs.2 and 11.

40.00 Set temp. $\frac{1}{4}$ sec.cor.

79.80 Intersect N.and S.line, 58 lks.S. of the cor.of secs.1,2, 11, and 12, heretofore described.

The course of the true line bet.secs.2 and 11 will therefore be $S.89^{\circ}47'W.$

August 18, 1910.

August 19, 1910: At 7 h 4 m a.m., l.m.t., I set off $37^{\circ}53'N.$, on the lat.arc; $12^{\circ}59'N.$, on the decl.arc; and determine a meridian with the solar, at the cor.of secs.1,2,11, and

Subdivision of T.34 S., R.8 W.-Continued.

Chains	
	12.
	Thence I run
	S.89°47'W., on a true line bet. secs. 2 and 11.
	Over mountainous land; through dense undergrowth, and and the heavy timber.
	Asc.
23.75	Top of ridge, 800 ft. above sec. cor., bears N. and S.
	Desc.
26.00	Begin steep descent, bears N. and S.
39.90	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor.; mkd. on brass cap $\frac{1}{4}$ S 2 in N half and S 11 in S half; from which
	A white pine, 6 ins. dia., bears N.55°W., 22 lks. dist.. mkd. $\frac{1}{4}$ S 2 B T.
	A pinon pine, 22 ins. dia., bears S.60°W., 18 lks. dist.. mkd. $\frac{1}{4}$ S 11 B T.
51.00	Begin descent over ledges, bears N. and S.
57.50	Bottom of canon, 800 ft. below ridge, course N.20°W.
	Asc. over ledges.
65.00	Top of ridge, 500 ft. above canon, bears NW and SE.
	Leave ledges, bears NW and SE.
	Desc. abruptly.
79.80	The temp. cor. of secs. 2, 3, 10, and 11.
	Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground, for cor. of secs. 2, 3, 10, and 11, mkd. on brass cap T 34 S S 3 in NW. R 8 W S 2 in NE. S 11 in SE.; and S 10 in SW. quadrants; from which
	A pinon pine, 5 ins. dia., bears N.60°E., 27 lks. dist.. mkd. T 34 S R 8 W S 2 B T.
	A pinon pine, 7 ins. dia., bears S.48°E., 18 lks. dist.. mkd. T 34 S R 8 W S 11 B T.
	A pinon pine, 6 ins. dia., bears S.22°30'W., 56 lks.

Subdivision of T.54 S., R.8 W.-Continued.

Chains

dist..mkd.T 34 S R 8 W S 10 B T.

A pinon pine, 6 ins.dia., bears N.40°W., 39 lks.

dist..mkd.T 34 S R 8 W S 3 B T.

The entire mile is high and steep mountains; the east and north slopes produce the better growth of under $\frac{1}{2}$ growth and timber; the soil on these slopes is rich loam about 6 ins.deep; the south and west slopes are more rocky and have very little soil on them.

Mountainous or heavily timbered land, or land covered with dense undergrowth, 79.80 chs.

August 19, 1910: At this cor. I set off 12°54'N., on the decl.arc; and at 0 h 4 m p.m., l.m.t., I observe the sun on the meridian, the resulting lat. is 37°53'N., which is the proper lat.nearly.

South, on a true line bet.secs.10 and 11.

Over mountainous land; through heavy cedar and pinon pine timber.

Desc.

8.00 Top of conglomerate ledge, 30 ft. high, bears E. and W.

8.50 Bottom of hollow, 100 ft. below sec.cor., course W.

Asc.

12.00 Top of spur, 75 ft. above hollow, bears NW and SE.

Desc.

17.00 Bottom of canon, 100 ft. below spur, course N.30°W.

Enter dense undergrowth, bears N.30°W. and S.30°E.

Asc.abruptly.

40.00 Set an iron post, 3 ft.long, 1 in.in dia., 26 ins.in the ground, for $\frac{1}{4}$ sec.cor..mkd.on brass cap $\frac{1}{4}$ S ; 10 in W.half and S 11 in E.half; from which

A cedar, 14 ins.dia., bears S.59°E., 43 lks.

dist..mkd. $\frac{1}{4}$ S 11 B T.

Subdivision of T.34 S.; R.8 W.-Continued.

Chains	A pinon pine, 12 ins. dia., bears N.71°W., 40 lks. dist..mld. $\frac{1}{4}$ S 10 B T.
45.00	Top of ridge, 800 ft. above canon, bears NW and SE. Desc.
51.00	Head of hollow, 100 ft. below ridge, course W. Leave timber and enter dense mahogany and oak brush, bears E. and W. Asc.
61.00	Enter scattering timber, bears E. and W.
65.00	Top of spur, 200 ft. above hollow, bears NW and SE. Desc.
75.00	Leave timber, bears NW and SW.
80.00	The cor. of secs. 10, 11, 14, and 15. Land, mountainous, steep and brushy. Soil, about the same on the whole mile; clay loam mixed with gravel; 2nd rate. Timber, cedar and pinon pine and a few red pine and white pine. Undergrowth, oak, and mahogany. Good grass for grazing on the north slopes. Mountainous or heavily timbered land; or land covered with dense undergrowth, 80.00 chs.

August 19, 1910.

August 20, 1910: At 7 h 3 m a.m., l.m.t., I set off 37°53' N.,
on the lat.arc; 12°39' N., on the decl.arc; and determine a
meridian with the solar, at the cor.of secs. 2, 3, 10, and 11.
Note: Knowing from the retracement of the north bdy. of
the Tp. that this line will not intersect N.bdy. within
limits; I run
North, on true line bet.secs. 2 and 3.

Subdivision of T.34 S., R.8 W.-Continued.

Chains	Over mountainous land; through heavy timber and scattering undergrowth.
	Asc.
12.00	Top of spur, 125 ft. above sec. cor., bears NW and SE.
	Desc.
23.50	Bottom of hollow, 200 ft. below ridge, course N.40°W.
	Asc.
34.50	Top of ridge, 250 ft. above hollow, bears E. and W.
	Desc.
40.00	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor.. mkd. on brass cap $\frac{1}{4}$ S 3 in W half and S 2 in E half; from which
	A cedar, 6 ins. dia., bears S.63°E., 29 lks. dist.. mkd. $\frac{1}{4}$ S 2 B T.
	A pinon pine, 8 ins. dia., bears W., 4 lks. dist.. mkd. $\frac{1}{4}$ S 3 B T.
46.00	Leave timber, and enter dense undergrowth, bears NE and SW.
49.00	Foot of descent, 300 ft. below ridge, bears N.80°E. and S.80°W.
	Enter bottom of Red Creek Canon.
52.00	Road, bears N.70°E. and S.70°W.
52.90	Red Creek, 15 lks. wide, 1 lk. deep, course S.80°W.
59.50	Leave Canon bottom, bears N.70°E. and S.70°W.
	Asc.
60.00	Enter scattering timber, bears N.70°E. and S.70°W.
72.00	Foot of perpendicular ledge, 40 ft. high, bears NE and SW.
76.99	Intersect N. bdy. of Tp., 11.94 chs. S.85°49'W., of the cor. of secs. 2, 3, 34, and 35, heretofore described. Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground, for closing cor. of secs. 2 and 3, mkd. on brass cap C CT 33 S R 8 W S 34 S 35 in N half. R 8 W S 2 in SE.; and T. 34 S S 3 in SW. quadrants; from which A cedar, 10 ins. dia., bears S.22°E., 85 lks. dist.. mkd. T 34 S R 8 W S 2 B T.

Subdivision of T.34 S., R.8 W. -Continued.

Chains

A pinon pine, 16 ins. dia., bears S.72°W., 42 lks.
dist..mkd.T 34 S R 8 W S 5 B T.

Note:I destroy all marks on the cor.of secs.2,3,34, and
35, which pertain to secs.2 and 3.

The entire mile is very rough with the exception of
the bottom of Red Creek Canon; the slopes are steep and
the soil is mostly washed off. In bottom of Red Creek Canon
the soil is black loam well mixed with boulders and is
very brushy. The remainder of the mile is covered with a
heavy growth of cedar and pinon pine timber and scattering
oak and buck brush. There is good grass wherever there
is any soil to support it.

Mountainous or heavily timbered land, or land covered
with dense undergrowth, 76.99 chs.

August 20, 1910.

August 22, 1910: At 7 h 3 m a.m., l.m.t., I set off 37°53'N.,
on the lat.arc; 12°00'N., on the decl.arc; and determine a
meridian with the solar, at the cor.of secs.4,5,8, and 9.
heretofore described ,

Thence I run

South, on a random line bet.secs.8 and 9.

40.00 Set temp. $\frac{1}{4}$ sec.cor.

80.00 Set temp.sec.cor.

Thence I run

West, on a random line bet.secs.8 and 17.

40.00 Set temp. $\frac{1}{4}$ sec.cor.

81.46 Intersect N.and S.line, 115 lks.S.of the cor.of secs.7,
8,17, and 18, heretofore described.

The falling is out of limits; therefore I begin at the

Subdivision of T.34 S., R.8 W.-Continued.

Chains	cor. of secs. 7, 8, 17, and 18, and run East, on a true line bet. secs. 8 and 17. Over mountainous land; through heavy timber and scattering undergrowth. Asc. along N. slope of ridge through lava rock slides.
9.40	Top of ridge, 150 ft. above sec.cor., bears N. and S. Desc.
12.00	Bottom of swale, 30 ft. below ridge, course N.30°W. Asc.
15.00	Top of ridge, 100 ft. above swale, bears N.50°W. and S.50°E Desc.
18.25	Bottom of swale, 100 ft. below ridge, course N.20°W. Asc.
25.00	Top of ridge, 100 ft. above swale, bears N.55°W. and S.55°E. Desc.
36.00	Bottom of hollow, 125 ft. below ridge, course N.20°W. Asc.
36.50	Begin more abrupt ascent, bears N.20°W. and S.20°E.
40.00	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for $\frac{1}{4}$ sec.cor.mkd.on brass cap $\frac{1}{4}$ S 8 in N half; and S 17 in S half; from which A pinon pine, 12 ins. dia., bears N.50°W., 52 lks. dist..mkd. $\frac{1}{4}$ S 8 B T.
	A pinon pine, 10 ins. dia., bears S.70°W., 68 lks. dist.mkd. $\frac{1}{4}$ S 17 B T.
48.20	Top of ridge, 100 ft. above hollow, bears NW and SE Desc.
56.00	Bottom of hollow, 125 ft. below ridge, course NW. Asc.
70.45	Top of ridge, 150 ft. above hollow, bears N.20°W. and S.20°E. Desc..
77.60	Bottom of hollow, 400 ft. below ridge, course N.10°W. Asc.

Subdivision of T.34 S., R.8 W.-Continued.

Chains	
81.46	<p>Intersect N. and S. line, 115 lks. N. of the temp. cor. Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground, for cor. of secs. 8, 9, 16, and 17, mkd. on brass cap T 34 S S 8 in. NW. R 8 W S 9 in. NE. S 16 in SE.; and S 17 in SW. quadrants; from which A pinon pine, 7 ins. dia., bears N. 20°W., 16 lks. dist.. mkd. T 34 S R 8 W S 8 B T.</p> <p>No other trees within limits; raise a mound of stone, 2 ft. base, 1$\frac{1}{2}$ ft. high, W. of cor.</p> <p>This mile is all broken and rough, sloping and draining to the northwest. There are numerous slides of volcanic rock in which there is very little soil.</p> <p>Timber, cedar and pinon pine.</p> <p>Undergrowth, scattering sage brush.</p> <p>Very little grass.</p> <p>Mountainous or heavily timbered land, 81.46 chs.</p> <p>August 22, 1910: At this cor. I set off 11' 54" W., on the decl. arc; and at 0 h 3 m p.m., l.m.t., I observe the sun on the meridian, the resulting lat. is 37° 52' N., which is the proper lat. nearly.</p> <hr/> <p>North, on a true line bet. secs. 8 and 9.</p> <p>Over mountainous land; through scattering timber and scattering undergrowth.</p> <p>Asc.</p> <p>13.00 Top of spur, 50 ft. above sec. cor., bears E. and W.</p> <p>Desc.</p> <p>13.50 Enter heavy timber, bears E. and W.</p> <p>23.00 Bottom of hollow, 100 ft. below spur, course N. 60°W.</p> <p>Asc. abruptly.</p> <p>37.75 Begin more gradual ascent, bears N. 60°W. and S. 60°E.</p>

Subdivision of T.34 S., R.8 W.-Continued.

Chains

- 38.85 Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for $\frac{1}{4}$ sec.cor.. mkd.on brass cap $\frac{1}{4}$ S 8 in W half and S 9. in E half; from which
 A cedar, 12 ins. dia., bears N.16°E., 35 lks.
 dist.. mkd. $\frac{1}{4}$ S 9 B T.
 A pinon pine, 4 ins. dia., bears S.20°W., 19 lks.
 dist.. mkd. $\frac{1}{4}$ S 8 B T.
 Top of spur, 150 ft. above hollow, bears NW and SE.
 Desc.
 42.00 Begin more abrupt descent, bears NW and SE.
 58.00 Bottom of hollow, 200 ft .below ridge, course NW.
 Leave heavy and enter scattering timber, bears NW and SE.
 Asc.
 66.00 Top of ridge, 60 ft. above hollow, bears E. and W.
 Desc.
 77.00 Bottom of hollow, 150 ft. below ridge, course W.
 Asc.
 78.85 The cor.of secs.4,5,8, and 9.
 Land, mountainous .
 Soil, gravelly loam; 2nd rate.
 Timber, cedar and pinon pine.
 Undergrowth, sage brush.
 Mountainous or heavily timbered land, 78.85 chs.

August 22, 1910.

August 23, 1910: At 7 h 3 m a.m., l.m.t., I set off 37°52'N., on the lat.arc; 11°40'N., on the decl.arc; and determine a meridian with the solar, at the cor.of secs.7,8,17, and 18, heretofore described.

Thence I run

South, on a random line bet.secs.17 and 18.

40.00 Set temp. $\frac{1}{4}$ sec.cor.

Subdivision of T.34 S., R.8 W.-Continued.

Chains

80.00 Set temp.cor.of secs.17,18,19, and 20.

August 23, 1910: At this cor. I set off $11^{\circ}34'N.$, on the decl. arc; and at 0 h 3 m p.m., l.m.t., I observe the sun on the meridian the resulting lat. is $37^{\circ}51'N.$, which is the proper lat. nearly.

Thence I run

West on a random line bet. secs.18 and 19.

40.00 Set temp.1 sec.cor.

80.48 Intersect W. bdy. of Tp.37 Pks. N. of the cor. of secs.13,18, 19, and 24, heretofore described.

August 23, 1910.

August 24, 1910: At 7 h 8 m a.m. l.m.t., I set off $37^{\circ}51'N.$ on the lat.arc; $11^{\circ}18'N.$, on the decl.arc; and determine a meridian with the solar at the cor. of secs.13,18,19, and 24.

Thence I run

N. $89^{\circ}44'E.$, on a true line bet. secs.18 and 19.

Over mountainous land; through heavy cedar and pinon pine timber.

4.00 Top of spur, 100 ft. above cor., bears N. $20^{\circ}E.$ and S. $20^{\circ}W.$

Desc.

6.25 Bottom of swale, 75 ft. below spur, course N. $10^{\circ}W.$

Asc.

17.25 Top of spur, 300 ft. above swale, bears N. and S.

Desc.

19.00 Bottom of hollow, 300 ft. below spur, course N.

Asc.

22.50 Top of ridge, 300 ft. above hollow, bears N. and S.

Desc.

23.80 Bottom of swale, 50 ft. below ridge, course N.

Subdivision of T.34 S., R.8 W.-Continued.

Chains	
	Asc.
25.60	Top of ridge, 100 ft. above swale, bears N.80°E. and S.80°W. Continue gradual asc.along S.slope of ridge.
40.42	Set an iron post, 3 ft.long, 1 in.in dia., 20 ins.in the ground, on solid rock, and surrounded with mound of earth and stone, for $\frac{1}{4}$ sec.cor., mkd.on brass cap $\frac{1}{4}$ S 18 in N half and S 19 in S half;from which A pinon pine, 7 ins.dia., bears N.12°E., 110 lks. dist..mkd. $\frac{1}{4}$ S 18 S T. A pinon pine, 6 ins.dia., bears S.61°E., 21 lks. dist..mkd. $\frac{1}{4}$ S 19 B T.
55.00	Bottom of hollow, course S.55°W. Asc.
80.42	The temp.cor.of secs.17,18,19, and 20. Set an iron post, 3 ft.long, 2 ins.in dia., 14 ins.in the ground, on bedrock;and surrounded with mound of earth and stone, for cor.of secs.17,18,19, and 20,mkd.on brass cap T 34 S S 18 in NW. R 8 W S 17 in NE. S 20 in SE.;and S 19 in SW. quadrants;from which A pinon pine, 10 ins.dia., bears N.57°E., 44 lks. dist..mkd.T 34 S R 8 W S 17 B T. A pinon pine, 7 ins.dia., bears S.44°E., 38 lks. dist..mkd.T 34 S R 8 W S 20 B T. A pinon pine, 6 ins.dia., bears S 67°W., 19 lks. dist.,mkd.T 34 S R 8 W S 19 B T.No other trees in 11 Raise a mound of stone, 2 ft.base, $1\frac{1}{2}$ ft.high,W.of cor. Land,broken ridges and hollows,general slope to the west The soil is red clay mixed with cobble rock and gravel from 6 to 12 ins.deep,with hard gravel subsoil. Heavy cedar and pinon pine and some scattering sage brush on entire mile. A very little grass. Mountainous or heavily timbered land, 80.42 chs.

Subdivision T.34 S., R.8 W. Continued.

Chains	August 24, 1910: At this cor. I set off 11°14' N., on the decl. arc; and at 0 h 2 m p.m., l.m.t., I observe the sun on the meridian, the resulting lat. is 37°51' N., which is the proper lat. nearly.
	North, on a true line bet. secs. 17 and 18.
	Over mountainous land; through heavy timber and scattering sage brush. Asc.
2.50	Top of ridge, 20 ft. above gor., bears E. and W. Desc.
33.00	Bottom of hollow, 30 ft. below ridge, course E. Asc.
39.00	Top of spur, 30 ft. above hollow, bears NW and SE. Desc.
40.00	Set an iron post, 3 ft. long, 1 in. in dia., 20 ins. in the ground, on bed rock, and surrounded with mound of earth and stone, for $\frac{1}{4}$ sec. cor.. mkd. on brass cap $\frac{1}{4}$ S 18° in W half and S 17° in E half; from which
	A pinon pine, 7 ins. in dia., bears S. 50° E., 21 lks. dist.. mkd. $\frac{1}{4}$ S 17 B.T.
	A pinon pine, 7 ins. dia., bears N. 50° W., 28 lks. dist.. mkd. $\frac{1}{4}$ S 18 B.T.
42.75	Bottom of hollow, 300 ft. below ridge, course N. 60° W. Asc.
70.00	Top of ridge, 40 ft. above hollow, bears E. and W. Desc. over volcanic rock slides.
80.00	The cor. of secs. 7, 8, 17, and 18. S. 70.00 chs. somewhat rolling and smooth slopes draining westerly. Soil clay loam, medium texture, rather dry, mixed with some gravel. Producing good growth of cedar and pinon pine timber and some sage brush. N. 10.00 chs. north slope black volcanic rocks with enough soil to support the growth of considerable cedar and pinon pine timber. Mountainous or heavily timbered land, 80.00 chs.

August 24, 1910.

Subdivision of T.34 S., R.8 W.-Continued.

Chains

Dunphy Stewart

Instrumentman G.L.O.

Survey commenced August 26, 1910; And executed with a Gurley Explorer's transit, No. 957, with solar attachment. The horizontal limb is provided with two double verniers placed opposite to each other, reading to single minutes of arc; which is also the least count of the latitude and declination arcs.

The instrument was examined, tested on the meridian at Salt Lake City, found correct, and was approved by the surveyor general for Utah, on August 6, 1910.

Note: For complete test of instrument see notes of Retracement Subdivision T.34 S.R.8 W.

At 7 h 2'm a.m., 1 .m.t., I set off $37^{\circ}51'N.$, on the lat. arc; $10^{\circ}38'N.$, on the decl. arc; and determine a meridian with the solar, at the cor. of secs. 15, 16, 21, and 22, heretofore described.

Thence I run

North, on random line bet. secs. 15 and 16.

40.00 Set temp. $\frac{1}{4}$ sec. cor.

80.00 Set temp. cor. of secs. 9, 10, 15, and 16.

Thence I run

$N.89^{\circ}45'W.$ on random line bet. secs. 10 and 15.

40.00 Set temp. $\frac{1}{4}$ sec. cor.

79.52 Intersect N. and S. line, 28 lks. N. of the cor. of secs. 10, 11, 14, and 15. heretofore described.

Thence I run

$S.89^{\circ}57'W.$, on a true line bet. secs. 10 and 15.

Over mountainous land; through dense mahogany and oak brush.

Desc.

Subdivision of T.34 S., R.8 W.-Continued.

Chains	
8.50	Head of hollow, 50 ft. below sec.cor., course N. Asc.
11.50	Top of ridge, 100 ft. above hollow, bears NW and SE. Desc.
15.00	Leave dense undergrowth and enter scattering undergrowth. bears NW and SE. Enter heavy cedar and pinon pine timber, bears NW and SE.
38.00	Wash, 30 lks. wide, 20 ft. deep, course S.15°W.
39.76	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground ground, for $\frac{1}{4}$ sec.cor., mkd.on brass cap $\frac{1}{4}$ S 10 in N half and S 15 in S half; from which A cedar, 8 ins. dia., bears S.6°W., 20 lks. dist..mkd. $\frac{1}{4}$ S 15 B T.
	A pinon pine, 16 ins. dia., bears N.69°W., 25 lks. dist..mkd. $\frac{1}{4}$ S 10 B T.
46.00	Wash, 40 lks. wide, 10 ft. deep, course N.60°W. Old road in bottom bears N.30°E. and S.30°W.
57.00	Bottom of canon, 600 ft. below ridge, course N.20°W. Asc. abruptly.
79.50	Foot of perpendicular conglomerate ledge, 40 ft. high, bears N. and S.
79.52	The temp.cor. of secs. 9, 10, 15, and 16. Set an iron post, 3 ft. long, 2 ins. in dia., 12 ins. in the ground, on bedrock; and surrounded by mound of earth and stone, for cor.of secs. 9, 10, 15, and 16, mkd.on brass cap T 34 S R9W in NW. R 8 W S 10 in NE. S 15 in SE.; and S 16 in SW quadrants; from which A cedar, 14 ins. dia., bears N.46°E., 30 lks. dist..mkd.T 34 S R 8 W S 10 B T. A pinon pine, 10 in. dia., bears S.71°30'E., 19 lks. dist..mkd.T 34 S R 8 W S 15 S T. A pinon pine, 12 ins. dia., bears S.52°W., 15 lks.

Subdivision of T.34 S., R.8 T.-Continued.

Chains

dist..mkd.T 34 S R 8 W S 16 B T.

A pinon pine, 11 ins. dia., bears N.47°50'W., 30 lbs.

dist..mkd.T 34 S R 8 W S 9 B T.

Land, mountainous, very steep.

Soil, E. 11.50 chs. rich dark loam 8 to 12 ins. deep, clay subsoil clay. W. 68.00 cms. hard gravelly and clay soil 4 to 8 ins. deep and in places washed off showing hard rock and gravel.

Timber, heavy cedar and pinon pine on W. 64.52 chs.

undergrowth, dense mahogany and oak on E. 15.00 chs.

A very little grass.

mountainous or heavily timbered land, or land covered with dense undergrowth, 79.52 chs.

August 26, 1910: At the noon hour the sky is overcast and solar observations are impossible.

South, on true line bet. secs. 15 and 16.

over mountainous land; through heavy cedar and pinon pine timber and scattering sage brush.

Asc. along east slope of ridge.

13.00 Top of spur, 100 ft. above sec. cor., bears E. and W.

Desc.

17.00 Head of hollow, 50 ft. below spur, course E.

Asc.

23.50 Top of spur, 200 ft. above hollow, bears E. and W.

Desc.

40.00 bottom of hollow, 150 ft. below spur, course E.

Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for $\frac{1}{2}$ Sec. cor.. mkd. on brass cap $\frac{1}{2}$ S 16 in W half and S 15 in E half; from which

A pinon pine, 14 ins. dia., bears N.38°E., 5 lbs.

dist..mkd. $\frac{1}{2}$ S 15 B T.

Subdivision of T.34.S., R.8.W.-Continued.

Chains	
	A pinon pine, 7 ins. dia., bears N.78°W., 11 lks. dist..mkd. 1 S 16 B.T.
	Asc.
41.00	Enter dense mahogany undergrowth, bears E. and W.
46.00	Top of spur, 200 ft. above hollow, bears E. and W.
	Desc.
51.50	Bottom of hollow, 100 ft. below spur, course E.
	Asc.
64.00	Top of ridge, 150 ft. above hollow, bears NW and SE.
	Desc.
70;00	Head of hollow, 50 ft. below ridge, course W.
	Asc.
75.00	Top of spur, 40 ft. above hollow, bears E. and W..
	Desc.
80.00	The cor. of secs. 15, 16, 21, and 22. Land, mountainous N.64.00 chs. on east slope of ridge, broken by numerous ridges and hollows running east and west. Soil clay loam mixed with cobble rock and pebbles. patches rich in vegetable matter, and other patches bare and dry. S.16.00 chs. slopes and drains to the west; otherwise very similar in character to N. part of mile. Mountainous or heavily timbered land, or land covered with dense undergrowth, 80.00 chs.
	August 26, 1910.
	August 27, 1910 At 7 h 2 m a.m., l.m.t., I set off 37°52' N. on the lat.arc; 10°17' N., on the decl.arc; and determine a meridian with the solar, at the cor.of secs. 9, 10, 15, and 16. Thence I run North, on random line bet.secs. 9 and 10. Set temp ¹ sec.cor.
40.00	

Subdivision of T.34 S., R.8 W.-Continued.

Chains

- 80.00 Set temp.cor.of secs.3,4,9, and 10.
Thence I run
N.89°57'E., on a random line betsecs.3 and 10.
- 40.00 Set temp. $\frac{1}{4}$ sec.cor.
- 79.38 Intersect N.and S line, 9 lks.N.of the cor.of secs.2,3,10,
and 11.
Thence I run
N.89°59'W., on a true line betsecs.3 and 10.
Over mountainous land;through heavy timber and scattering
undergrowth.
Desc.over a series of low ledges.
- 8.10 Bottom of canon, 200 ft.below sec.cor., course N.20°W.
Asc.abruptly over ledges.
- 52.90 Top of ridge, 300 ft.above canon,bears N.and S.
Desc.over low ledges.
- 59.38 Set an iron post, 3 ft.long, 1 in.in dia., 14 ins.in the
ground, on bed rock, and surrounded with mound of earth
and stone, for $\frac{1}{4}$ sec.cor.mkd.on brass cap $\frac{1}{4}$ S 3 in N half
and S 10 in S half;from which
A pinon pine, 6 ins.dia., bears N.35°W., 21 lks.
dist..mkd. $\frac{1}{4}$ S 3 B T.
A cedar, 24 ins.dia., bears S.10°E., 9 lks.
dist., mkd. $\frac{1}{4}$ S 10 B T.
- 50.00 Bottom of canon, 300 ft.below ridge, course N.
Leave ledges,bears N.and S.
Asc.
- 68.20 Top of ridge, 300 ft.above canon,bears N.and S.
Desc.
- 79.38 The temp.cor.of secs.3,4,9, and 10.
Set an iron post, 3 ft.long, 2 ins.in dia., 24 ins.in the
ground, for cor.of secs.3,4,9, and 10,mkd.on brass cap
T 34 S S 4 in NW.
R 8 W S 3 in NE.
S 10 in SE.;and
S 9 in SW.quadrants;from which

Subdivision of T.34 S., R.8 W.-Continued.

Chains

A pinon pine, 8 ins. dia., bears N.51°30'E., 25 lms.

dist..mkd.T 34 S R 8 W S 3 B T.

A cedar, 1 in., 7 ins. dia., bears S.48°E.35 lms.

dist..mkd.T 34 S R 8 W S 10 B T.

No other trees within limits; raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$ ft. high, W. of cor.

Entire mile over rough mountain ridges and hollows; a great many sandstone ledges from 5 ft. to 30 ft. high; drainage northward into Red Creek Canon. Soil is washed off in many places leaving bare rocks, in other places soil is rich and from 4 to 10 ins. deep. Heavy cedar and pinon pine timber on entire mile. Scattering sage brush. Good grass in patches.

Mountainous or heavily timbered land, 79.38 chs.

August 27, 1910: At this cor. I set off 10°12'N., on the decl. arc; and at 0 h 2 m p.m.l.m.t., I observe the sun on the meridian, the resulting lat. is 57°53'N., which is the proper lat. nearly.

South, on true line bet. sec's. 9 and 10.

Over mountainous land; through scattering timber and dense sage brush.

Desc. gradually.

12.40 Old trail bears N.40°W. and S.40°E.

16.40 Begin abrupt descent over volcanic ledges, bears NW and SE.

26.20 Bottom of canon, 250 ft. below sec.cor., course N.80°W.

Asc. abruptly over volcanic ledges.

50.00 Leave volcanic ledges, bears NW and SE.

34.00 Top of spur, 300 ft. above canon, bears E. and W.

Enter heavy cedar and pinon pine timber, bears E. and W.

Desc.

40.00 Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the

Subdivision of T.34 S., R.8 W. -Continued.

Chains	ground, for $\frac{1}{2}$ sec.cor..mkd.on brass cap $\frac{1}{4}$ S 9 in W half; and S 10 in E half;from which A cedar, 8 ins.dia., bears S.18°30'E., 56 lks. dist..mkd. $\frac{1}{4}$ S 10 B T. A pinon pine, 7 ins.dia. bears S.27°W.9 lks. dist..mkd. $\frac{1}{4}$ S 9 B T.
46.00	Bottom of hollow, 100 ft. below spur, course E. Asc.
55.00	Top of spur, 100 ft. above hollow, bears E. and W. Desc.
65.00	Head of hollow, 100 ft. below spur, course N.70°E. Asc.
69.00	Top of spur, 100 ft. above hollow, bears E. and W. Desc.
72.00	Bottom of hollow, 75 ft. below spur, course E. Asc.
76.70	Top of spur, 100 ft. above hollow, bears E. and W. Desc.
80.00	The cor.of secs.9,10,15, and 16. N.16.40 chs.is south slope of ridge;good rich clay soil about 1 ft.deep,with clay subsoil;scattering cedar and pinon pine timber and dense sage brush.Next 17.60 chs. is very rough canon;slopes entirely covered with volcanic rocks and boulders;scarcely any soil on it .Balance of mile is broken ridges and hollows.on east slope of ridge covered with heavy growth of cedar and pinon pine timber. red clay soil,rather dry and hard producing patches of good grass . Mountainous or heavily timbered land,or land covered with dense undergrowth,80.00 chs.

August 27, 1910

—John R Stewart
Instrumentman G.L.O.

Subdivision of T.34 S., R.8 W.-Continued.

Chains

September 2, 1910, At 7 h 0 m a.m., l.m.t., I set off 37°53' N., on the lat.arc; 8°09' N., on the decl.arc; and determine a meridian with the solar, at the cor.of secs.3,4,9, and 10.

Thence I run

Knowing from retracements made that the line will not close within limits.

N.0°01'W., on true line betsecs.3 and 4.

Over mountainous land; through scattering timber and dense sage brush.

Asc.

7.50 Top of ridge, 50 ft. above sec.cor., bears NE and SW.

Desc.

26.00 Head of hollow, 100 ft. below ridge, course N.80°W.

Asc.

30.00 Top of spur, 50 ft. above hollow, bears N.75°W. and S.75°E.

Desc. over ledges.

40.00 Set an iron post, 3 ft. long, 1 in. in dia., 12 ins. in the ground, on bed rock, and surround^{ed} by mound of earth and stone, for $\frac{1}{4}$ sec.cor.mkd.on brass cap $\frac{1}{4}$ S 4 in W half and S 3 in E half; from which

A pinon pine, 8 ins.dia., bears N.86°E., 13 lks.
dist..mkd. $\frac{1}{4}$ S 3 B T.

A pinon pine, 8 ins.dia., bears N.26°W., 26 lks.
dist..mkd. $\frac{1}{4}$ S 4 B T.

60.00 Foot of descent, 800 ft. below ridge, bears NE and SW.

Leave timber, bears NE and SW.

Enter Parowan Valley.

64.10 Red Creek, 13 lks.wide, 8 ins.deep, gravelly bottom, rapid current, course N.85°W.

67.55 Road from Paragoonah to Red Creek Canon, bears E. and W.

74.22 Intersect N.bdy.of Tp., 9.33 chs.S.89°W., from the cor. of secs.3,4,33, and 34, heretofore described.

Set an iron post, 3 ft. long, 2 ins.in dia., 24 ins.in the

Subdivision of T.34 S., R.8 W.-Continued.

Chains

ground, for closing cor. of secs. 3 and 4, mkd. on brass cap
C. C T 33 S R.8 W S 33 S 34 in N half.

R.8-W S 3 in SE.; and

T 34 S S 4 in SW. quadrants; and raise a mound
of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, S. of cor.

Note: I destroy all marks on the cor. of secs. 3, 4, 33, and
34, which pertain to secs. 3 and 4.

S.30.00 chs. high mountain ridges sloping westerly. Soil
clay loam, medium texture, dry, subsoil cemented gravel.

Next 30.00 chs. on steep west slope of mountain, sandstone
ledges; soil stiff red clay and gravel, 3 or 4 ins. deep,
on cemented gravel subsoil or solid rock. Supports a
scattering growth of cedar and pinon pine timber and
sage brush; and patches of grass.

N.14.22 chs. in Parowan valley nearly level. Soil rich
clay loam about 2 ft. deep, with streaks of gravel and
small boulders running through it. Dense undergrowth.

Mountainous land, or land covered with dense undergrowth
74.22 chs.

September 2, 1910: At this cor. I set off $8^{\circ}03'N.$, on the
decl. arc; and at 12 h 00 m. M., l.m.t., I observe the
sun on the meridian, the resulting lat. is $37^{\circ}54'N.$, which
is the proper lat. nearly.

September 2, 1910.

August 25, 1910: At 7 h 2 m a.m., l.m.t., I set off $57^{\circ}49'N.$
on the lat. arc; $10^{\circ}59'N.$, on the decl. arc; and determine a
meridian with the solar, at the point for cor. of secs.
32 and 33, on S. bdy. of Tp.; which is 4.56 chs. N. $89^{\circ}40'W.$
of the witness cor. to cor. of secs. 32 and 33, a quartzite
stone, $8 \times 10 \times 7$ ins., above ground, firmly set, and mkd.
and witnessed as described by the surveyor general.

Subdivision of T.34.S., R.8.W.-Continued.

Chains	
	Thence I.rum N.0°9'W., betsecs.32 and 33.
	Over mountainous land; through heavy timber and scattering undergrowth.
	Desc.abruptly.
18.50	Bottom of hollow, 500 ft. below cor., course N.30°W.
	Asc.gradually.
35.00	Top of spur, 100 ft. above hollow, bears NW and SE.
	Desc.
40.00	Set an iron 3 ft.long, 1 in.in dia., 26 ins. in the ground, for $\frac{1}{4}$ sec.cor.. mkd.on brass cap $\frac{1}{4}$ S 32 in W half and S.33 in E half; from which
	A pinon pine, 5 ins.dia., bears N.54°E., 58 lks. dist..mkd. $\frac{1}{4}$ S 33 B T.
	A cedar, 5 ins.dia., bears S.76°W., 36 lks. dist..mkd. $\frac{1}{4}$ S 32 B T.
44.75	Old road, bears N.40°W.and S.40°E.
45.00	Bottom of Dry Canon, 250 ft.below spur, course N.85°W.
	Asc.
51.75	Top of spur, 100 ft.above canon, bears N.50°E.and S.50°W.
	Desc.
57.00	Bottom of Ravine, 100 ft.below spur, course S.35°W.
	Asc.
58.40	Foot of ledge, 50 ft.high, bears NE and SW.
77.90	Top of spur, 150 ft.above ravine, bears H.30°W.and S.30°E.
	Desc.
80.00	Set an iron post, 3 ft.long, 2 ins.in dia., 26 ins. in the ground, for cor.of secs.28, 29, 32, and 33,mkd.on brass cap T 34 S S 29 in NW.
	R 8 W S 28 in NE. S 33 in SE.;and S 32 in SW.quadrants;from which
	A spruce, 8 ins.dia., bears H.82°E., 24 lks.

Subdivision of T.34 S., R.6 T.-Continued.

Chains

dist. mkt. T 34 S R 8 T S 26 B T.

A pinon pine, 6 ins. dia., bears S.35°E., 33 lbs.

dist. mkt. T 34 S R 8 T S 33 B T.

A pinon pine, 10 ins. dia., bears S.13°30'W., 6 lbs.

dist. mkt. T 34 S R 8 T S 32 B T.

A white pine, 16 ins. dia., bears N.52°W., 70 lbs.

dist. mkt. T 34 S R 8 T S 29 B T.

S.18.50 chs. Very steep north slope of mountain, very little soil covering the bare rocks and in places there is no soil on the bed rock. There is however considerable cedar, pinon pine, white pine, and red pine timber and oak and maple undergrowth. Balance of mile is broken ridges and hollows, sloping westerly. Soil clay loam, 8 to 12 ins. deep, on subsoil of hard clay. "atches" of cool grass.

Mountainous heavily timbered land, 80.00 chs.

August 26, 1910: At thin cor. I set off 10°53'N. on the decl. arc; and at 0 h 2 m. p.m., l.m.t., I observe the sun on the meridian, the resulting lat. is 37°49'N., which is the proper lat. nearly.

C.09°40'E., on a random line bet. secs. 28 and 33.

40.00 Cut temp., 1 sec. cor.

Intersect N. and S. line, 5 km. S. of the cor. of secs. 27, 28, 33, and 34.

Through 1 run

S.07°42'W., on a true line bet. secs. 28 and 33.

Over mountainous land; through heavy timber and scattering undergrowth.

Cross over ledge.

Large ledge, 100 ft. below cor., bears N.10°E. and S.30°W.

Bottom of cor., 225 ft. below cor., course S.30°W.

lat.

Subdivision of T.34 S., R.8 W.-Continued.

Chains

- 9.25 Top of spur, 150 ft. above canon, bears N.15°E. and S.15°W.
Desc.
- 12.00 Bottom of swale, 50 ft. below spur, course S.10°W.
Asc.
- 14.85 Top of spur, 50 ft. above swale, bears N.10°E. and S.10°W.
Desc.
- 30.40 Bottom of hollow, 75 ft. below spur, course S.25°E.
Asc.
- 36.80 Top of spur, 50 ft. above hollow, bears N.20°W. and S.20°E.
Desc.
- ✓ 40.04 Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the
ground, for $\frac{1}{2}$ sec. cor.. mkd. on brass cap $\frac{1}{4}$ S 28 in N half
and S 33 in S half; from which
A yellow pine, 13 ins. dia., bears N.15°W., 137 lks.
dist.. mkd. $\frac{1}{4}$ S 28 B T.
A yellow pine, 30 ins. dia., bears S.60°W., 24 lks.
dist.; mkd. $\frac{1}{4}$ S 33 B T.
- 40.50 Bottom of swale, 60 ft. below spur, course S.10°W.
Asc.
- 52.50 Top of ridge, 90 ft. above swale, bears N.50°W. and S.50°
E.
Desc.
- 65.00 Bottom of hollow, 100 ft. below ridge, course S.50°E.
Asc.
- 66.65 Top of spur, 75 ft. above hollow, bears N.20°W. and S.20°
E.
Desc.
- 71.25 Bottom of hollow, 50 ft. below spur, course S.20°E.
Asc.
- 80.08 The cor. of secs. 28, 29, 32, and 33.
Entire mile over broken ridge and hollows sloping and
draining into Dry canon. Soil, hard dry clay, mixed with
rocks, on clay and gravel subsoil. Well timbered with
cedar, pinon pine, and yellow pine. Scattering undergrowth

Subdivision of T. 24 S., R. 8 W.-Continued.

Chains	<p>of sage brush. A very little grass. Mountainous or heavily timbered land, 80.08 obs.</p>
	August 25, 1910.
	<p>August 26, 1910: At 7 h 2 m a.m., l.m.t., I set off 37°49' N., on the lat. arc; 10°38' N., on the decl. arc; and determine a meridian with the solar, at the cor. of secs. 28, 29, 32, and 33.</p>
	<p>Thence I run N. 0°11' W., bot. secs. 28 and 29.</p>
	<p>Over mountainous land, through heavy timber and scattering sage brush.</p>
	Desc.
9.65	Bottom of swale, 60 ft. below sec.cor., course SE.
	Asc.
12.85	Top of ridge, 40 ft. above swale, bears NE and SW.
	Desc.
17.00	Bottom of hollow, 75 ft. below ridge, course N. 30°W.
	Asc.
20.50	Top of spur, 75 ft. above hollow, bears N. 30°W. and S. 30°E.
	Desc.
26.80	Bottom of canon, 125 ft. below spur, course W., comes from N. 35°E.
	Asc. over ledges.
40.00	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for sec.cor.. mkd. on brass cap $\frac{1}{4}$ S 29 in W half and S 28 in E half; from which
	A cedar, 10 ins. dia., bears N. 40°W., 32 lbs.
	dist.. mkd. $\frac{1}{4}$ S 29 B T.
	A cedar, 10 ins. dia., bears S. 30°E., 56 lbs.
	dist.. mkd. $\frac{1}{4}$ S 28 B T.

Subdivision of T.34 S., R.8 W.-Continued.

Chains	
48.00	Top of ridge, 300 ft. above canon, bears E. and W. Desc.
57.50	Bottom of hollow, 130 ft. below ridge, course NE. Asc.
58.50	Top of spur, 20 ft. above hollow, bears E. and W. Desc. abruptly.
80.00	Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground, for cor. of secs. 20, 21, 28, and 29, mkd. on brass cap T 34 S S 20 in NW. R 8 W S 21 in NE. S 28 in SE.; and S 29 in SW. quadrants; from which A balsam, 7 ins. dia., bears N.50°E., 25 lks. dist.. mkd. T 34 S R 8 W S 21 B T. A balsam, 6 ins. dia., bears S.66°15'E., 17 lks. dist.. mkd. T 34 S R 8 W S 28 B T. A pinon pine, 6 ins. dia., bears S.41°W., 73 lks. dist.. mkd. T 34 S R 8 W S 29 B T. A balsam, 5 ins. dia., bears N.45°W., 18 lks. dist.. mkd. T 34 S R 8 W S 20 B T.
S.48.00	chs. mountainous land, generally south slope; heavy cedar, pinon pine, and balsam timber. Soil, sandy and clay loam mixed with gravel, from 10 to 16 ins. deep, patches of grass. H.32.00 chs. north slope, steep, heavy timber. Soil loam, moist, but contains a great many rocks. Scattering sage brush on entire mile.
	Mountainous or heavily timbered land, 80.00 chs.
	August 26, 1910: At the noon hour the sky was overcast and solar observations were impossible.

August 26, 1910..

Subdivision of T.34 S., R.8 W.-Continued.

Chains	August 27 1910: At 7 h 2 m a.m., l.m.t., I set off $37^{\circ}50'W.$ on the lat.arc; $10^{\circ}17'N.$, on the decl.arc; and determine a meridian with the solar, at the cor.of secs.20, 21, 28, and 29.
	Thence I run $S.89^{\circ}42'E.$, on a random line bet.secs.21 and 28.
40.00	Set temp. $\frac{1}{4}$ sec.cor.
79.96	Intersect N.and S.line, 2 lks.N.of the cor.of secs.21, 22, 27, and 28.heretofore described.
	Thence I run $N.89^{\circ}41'W.$, on a true line bet.secs.21 and 28.
	Over mountainous land; through dense undergrowth.
	Desc.gradually.
11.50	Leave sage and enter scattering undergrowth, bears NE and SW.
	Enter heavy timber, bears NE and SW..
13.00	Begin descent, bears NW and SE.
26.25	Bottom of hollow, 100 ft.below sec.cor., course $N.40^{\circ}W.$
	Asc.
37.10	Top of ridge, 100 ft.above hollow, bears N.and S.
	Desc.
39.98	Set an iron post, 3 ft.long, 1 in.in dia., 26 ins.in the ground, for $\frac{1}{4}$ sec.cor., mkd.on brass cap $\frac{1}{4}$ S 21 in N half and S 28 in S half; from which
	A pinon pine, 12 ins.dia., bears $N.21^{\circ}E.$, 31 lks. dist..mkd. $\frac{1}{4}$ S 21 B T.
	A pinon pine, 14 ins.dia., bears $S.15^{\circ}W.$, 35 lks. dist..mkd. $\frac{1}{4}$ S 28 B T.
46.10	Bottom of swale, 300 ft.below ridge, course $S.10^{\circ}W.$
	Asc.
53.50	Top of spur, 25 ft.above hollow, bears N.and S.
	Desc.
71.00	Bottom of hollow, 30 ft.below spur, course $N.60^{\circ}W.$
	Asc.
79.96	The cor.of secs.20, 21, 28, and 29.

Subdivision of T.34 S., R.8 W.-Continued.

Chains

Land, E. 11.50 chs. is gentle slope to the west. Covered with oak, sage, and buck brush. Soil, black loam, 10 to 14 ins. deep, on clay subsoil. W. 68.46 chs. is over broken ridges and hollows steep and rocky; Soil, red sand and clay, dry and barren except for cedar and pinon pine timber.

Mountainous or heavily timbered land, or land covered with dense undergrowth, 79.96 chs.

August 27, 1910.

August 29, 1910: At 7 h 1 m a.m., l.m.t., I set off $37^{\circ}50'N$ on the lat.arc; $9^{\circ}35'W.$, on the decl.arc; and determine a meridian with the solar, at the cor.of secs. 20, 21, 28, and 29.

Thence I run

North'ly., bet.secs. 20 and 21.

Over mountainous land; through heavy cedar and pinon pine timber.

Desc.abruptly.

5.50 Bottom of hollow, 50 ft. below sec.cor., course N. $60^{\circ}W.$
Asc.abruptly.

21.00 Top of spur, 200 ft. above hollow, bears E. and W.

30.00 Bottom of swale, 60 ft. below spur, course W.
Asc.

53.35 Top of spur, 90 ft. above swale, bears E. and W.
Desc.

40.00 Set an iron post, 3 ft. long, 1 in .in dia., 26 ins. in the ground, for $\frac{1}{4}$ sec.cor.. mkd.on brass $\frac{1}{4}$ S 20 in W half and S 21 in E half; from which

A pinon pine, 5 ins.dia., bears S. $50^{\circ}E.$, 21 lks.

Subdivision of T.34 S., R.8 W.-Continued.

Chains	
	mkd. $\frac{1}{4}$ S 21 B T.
	A pinon pine, 8 ins. dia., bears S.71°W., 30 lks. dist..mkd. $\frac{1}{4}$ S 20 B T.
43.80	Aug. 29, 1910: At noon, cloudy, solar observations impossible. Bottom of hollow, 300 ft. below spur, course W.
	Asc.
61.75	Top of ridge, 300 ft. above hollow, bears E. and W.
	Desc.
67.00	Bottom of swale, 150 ft. below ridge, course W.
	Asc.
71.50	Top of ridge, 40 ft. above swale, bears E. and W.
	Desc.
80.00	Set an iron post, 3 ft. long, 2 ins. in dia. 24 ins. fur the ground, for cor. of secs. 16, 17, 20, and 21, mkd. on brass cap T 34 S S 17 in NW. R 8 W S 16 in NE. S 21 in SE.; and S 20 in SW. quadrants; from which A balsam, 7 ins. dia., bears N.69°E., 63 lks. dist..mkd. T 34 S R 8 W S 16 B T. A pinon pine, 8 ins. dia., bears S.41°E., 55 lks. dist..mkd. T 34 S R 8 W S 21 B T. A balsam, 6 ins. dia., bears S.5°W., 12 lks. dist..mkd. T 34 S R 8 S S 20 B T. A balsam, 6 ins. dia., bears N.37°W., 56 lks. dist..mkd. T 34 S R 8 W S 17 B T. The entire mile is rough and broken. Soil white clay, hard and dry, mixed with shale. Timber cedar and pinon pine, red pine, white pine and balsam. A very little grass. Mountainous or heavily timbered land, 80.00 chs.

August 29, 1910.

Subdivision of T.34 S., R.8 W.-Continued.

Chains	
	August 30, 1910: At 7 h 1 m a.m., l.m.t., I set off 37°51' N. on the lat.arc; 9°14' N., on the decl.arc; and determine a meridian with the solar at the cor.of secs.16,17,20, and 21.
	Thence I run
	S.89°41' E., on a random line bet.secs.16 and 21.
40.00	Set temp. $\frac{1}{4}$ Sec.cor.
80.62	Intersect N.and S.line, 2 lks.N.of the cor.of secs.15,16, 21, and 22, heretofore described.
	Thence I run
	N.89°40' W., on a true line bet.secs.16 and 21.
	Over mountainous land; through heavy cedar and pinon pine timber and scattering undergrowth.
	Desc.
12.40	Bottom of swale, 70 ft. below sec.cor., course N.60°W.
	Asc.abruptly.
25.40	Top of spur, 100 ft. above swale, bears NW and SE.
	Desc.abruptly.
40.20	Canon, 200 ft. below spur, course N.30°W.
	Asc.abruptly.
40.62	Set an iron post, 3 ft.long, 1 in.in dia., 26 ins.in the ground, for $\frac{1}{4}$ sec.cor.. mkd.on brass cap $\frac{1}{4}$ S 16 in N half; and S 21 in S half; from which
	A red pine, 14 ins.dia., bears N.15°W., 50 lks.
	dist..mkd. $\frac{1}{4}$ S 16 B T.
	A mahogany, 5 ins.dia., bears S.15°E., 75 lks.
	dist..mkd. $\frac{1}{4}$ S 21 B T.
41.60	Leave undergrowth, bears NW and SE.
56.25	Top of ridge, 200 ft.above canon, bears N.20°W. and S.20°E.
	Desc.
71.62	Bottom of hollow, 100 ft.below ridge, course N.40°W.
	Asc.
80.62	The cor.of secs.16,17,20 and 21.

Subdivision of T.34 S., R.8 W.-Continued.

Chains	The entire mile is in rough broken country covered with heavy cedar and pinon pine timber and scattering undergrowth. Soil, red and white clay loam mixed with shale and gravel, dry on the west and south slopes and damp on north and east slopes, from 4 to 10 ins. deep, on subsoil of clay and cemented gravel. Grass in patches. Mountainous or heavily timbered land, 80.62 chs.
	August 30, 1910.
	August 31, 1910: At 7 h 0 m a.m., l.m.t., I set off $37^{\circ}51' N.$ on the lat.arc; $8^{\circ}52' N.$, on the decl.arc; and determine a meridian with the solar, at the cor.of secs. 16, 17, 20, and 21. Note: Knowing from retracements already made that the line betsecs. 17 and 20 will not close within limits; I run $N.89^{\circ}35' W.$, on a true line betsecs. 17 and 20. Over mountainous land; through heavy timber and scattering undergrowth.
	Asc.
.50	Top of spur, 20 ft. above cor., bears NW and SE. Desc.
4.50	Head of hollow, 50 ft. below spur, course N. Asc.
7.00	Top of spur, 50 ft. above hollow, bears $N.55^{\circ}W.$ and $S.55^{\circ}E.$ Desc.abruptly.
25.00	Enter dense mahogany and buck brush, bears N. and S.
25.25	Bottom of canon, 350 ft. below spur, course N. Asc.abruptly.
38.00	Leave heavy timber and enter scattering timber, bears N. and S.

Subdivision of T.34 S., R.8 W.-Continued.

Chains	
40.00	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor.. mkd. on brass cap $\frac{1}{4}$ S 17 in N half and S 20 in S half; from which A pinon pine, 6 ins. dia., bears N.44°W., 63 lks. dist.. mkd. $\frac{1}{4}$ S 17 B T. A cedar, 8 ins. dia., bears S.6°W., 45 lks. dist.. mkd. $\frac{1}{4}$ S 20 B T. Leave undergrowth, bears N. and S. August 31, 1910: At this cor. I set off 8°46'N., on the decl. arc; and at 12 ^h . 0 ^m .N.M., l.m.t., I observe the sun on the meridian, the resulting lat. is 37°51'N., which is the proper lat. nearly.
47.00	Top of spur, 600 ft. above canon, bears N.20°E. and S.20°W. Desc.
50.00	Bottom of swale, 50 ft. below spur, course N.15°E. Old road in bottom bears N.15°E. and S.15°W. Asc.
55.00	Top of ridge, 75 ft. above swale, bears N.20°E. and S.20°W. Desc.
72.70	Intersect N. and S. line, 7.50 chs. North of the cor. of secs. 17, 18, 19, and 20, heretofore described. Set an iron post, 3 ft. long, 2 ins. in dia., 12 ins. in the ground, on bed rock, and surrounded by mound of earth and stone, for closing cor. of secs. 17 and 20, mkd. on brass cap T 34 S R 8 W in N half. S C S L8 S 19 in W half. S 17 in NE. S 20 in SE. quadrants; from which A pinon pine, 6 ins. dia., bears N.43°E., 53 lks. dist.. mkd. T 34 S R 8 W S 17 B T. A pinon pine, 6 ins. dia., bears S.34°E., 30 lks. dist.. mkd. T 34 S R 8 W S 20 B T.

Subdivision of T.34 S., R.8 W.-Continued.

Chains

Note: I destroy all marks on the cor. of secs. 17, 18, 19, and 20, which pertain to secs. 17 and 20.

The entire mile is over broken ridges and hollows, steep and rocky. Soil, red and white clay mixed with shale and volcanic rock, about 1 ft. deep, subsoil gravel and rock. grass in patches. Timber, cedar and pinon pine.

Mountainous or heavily timbered land, or land covered with dense undergrowth. 72.70 chs.

August 31, 1910.

September 1, 1910: At 7 h 0 m a.m., l.m.t., I set off 57°51' N., on the lat.arc; 8°31' N., on the decl.arc; and determine a meridian with the solar, at the cor. of secs. 16, 17, 20, and 21.

Thence I run

N.0°1'W., on a true line bet. secs. 16 and 17.; knowing from retracements that the line will not close within limits.

Over mountainous land; through heavy timber.

Desc. .

7.80 Bottom of hollow, 150 ft. below sec.cor., course N.40°W.

Asc. .

19.40 Top of spur, 100 ft. above hollow, bears N.60°W. and S.60° E.

Desc. .

32.30 Bottom of swale, 25 ft. below spur, course W.

Asc. .

25.90 Top of ridge, 60 ft. above swale, bears E. and W.

Desc. .

34.50 Bottom of swale, 100 ft. below spur, course W.

Asc. .

Subdivision of T.34 S., R.8 W.-Continued.

Chains

36.80 Top of ridge, 40 ft. above swale, bears E. and W.

Desc.

39.40 Bottom of hollow, 100 ft. below ridge, course N. 70°W.

Asc. over ledges.

39.72 Foot of sloping ledge, 60 ft. high, bears E. and W.

Note: The point for $\frac{1}{4}$ sec.cor. will fall on this ledge where it will be impossible to perpetuate the cor.; therefore at this point:

Set an iron post, 3 ft. long, 1 in. in dia., 14 ins. in the ground, on solid rock, and surrounded by mound of earth, and stone, for witness cor. to $\frac{1}{4}$ sec.cor., mkd. on brass cap T 34 S R 8 W in N half; W C $\frac{1}{4}$ S 17 in W half; and S 16 in E half; from which

A pinon pine, 6 ins. dia., bears S. 23°E., 45 lks. dist.
mkd.: W C $\frac{1}{4}$ S 16 B T.

A pinon pine, 7 ins. dia., bears S. 70°W., 49 lks. dist.
mkd.: W C $\frac{1}{4}$ S 17 B T.

40.000 Falls on sloping ledge cor. not set.

45.00 Top of ridge, 100 ft. above hollow, bears E. and W.

Desc.

60.00 Bottom of swale, 50 ft. below ridge, course W. Asc.

65.00 Top of spur, bears E. and W. Desc.

70.00 Top of ridge, 50 ft. above swale, bears NW and SE.

Desc.

75.45 Intersect E. and W. line, 9.25 chs. W. of the cor. of secs.

8, 9, 16, and 17, heretofore described.

100 ft. below ridge.

Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground, for closing cor. of secs. 16, and 17, mkd. on brass cap

C C T 34 S R 8 W S 8 S 9 in N half.

S 16 in SE.; and

S 17 in SW quadrants; from which

A pinon pine, 6 ins. dia., bears S. 74°E., 159 lks.

Subdivision of T.34 S., R.8 W.-Continued.

Chains

dist..mkd.T 34 S R 8 W S 16 B T.

A pinon pine, 10 ins. dia., bears S. 41°W., 98 lks.

dist..mkd.T 34 S R 8 W S 17 B T.

Note : I destroy all mark on the cor.of secs.8,9,16, and 17, which pertain to secs.16 and 17.

This entire mile is over rough broken ridges and hollows slopingly easterly. Soil, red clay mixed with gravel from 6 to 12 ins. deep, subsoil, cemented gravel. Timber cedar and pinon pine on entire mile. Scattering sage brush and buck brush undergrowth.

Mountainous or heavily timbered land, 73.45 chs.

September 1, 1910: At this cor. I set off 8° 25' N., on the decl. arc; and at 0 h 0.1 m p.m., 1.m.t., I observe the sun on the meridian, the resulting lat. is 37° 52' N., which is the proper lat. nearly.

From the cor.of secs.8 and 9, heretofore described

I run

S, 89° 40' E., on a random line bet.secs.9 and 16.

40.00 Set temp. $\frac{1}{4}$ sec.cor.

71.37 Intersect N. and S. line, 6.08 chs. S. of the cor.of secs. 9, 10, 15, and 16, heretofore described.

Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground, for closing cor.of secs.9 and 16, mkd.on brass cap

T 34 S R 8 W in N half.

C C S 10 S 15 in E half.

S 16 in SW.; and

S 9 in NW quadrants; from which

A pinon pine, 10 ins. dia., bears S. 72°W., 34 lks.

dist..mkd.T 34 S R 8 W S 16 B T.

A cedar, 18 ins. dia., bears N. 46°W., 21 lks.

dist..mkd.T 34 S R 8 W S 9 B T.

Note: I destroy all marks on the cor.of secs.9,10,15, and

Subdivision of T.34 S., R.8 W.-Continued.

Chains

- 16 which pertain to secs. 9 and 16.
Thence I run
W.89°40'W., on a true line bet. secs. 9 and 16.
Over mountainous land; through heavy timber and scattering
undergrowth.
- Asc.
- 9.00 Top of ridge, 150 ft. above cor., bears N. and S.
Desc.
- 25.20 Bottom of hollow, 200 ft. below ridge, course NW.
Asc.
- 37.25 Top of spur, 60 ft. above hollow, bears N. and S.
Desc.
- 59.47 Bottom of swale, 50 ft. below spur, course N.
Asc.
- 40.00 Set an iron post, 3 ft. long, 1 in. in dia., 14 ins. in the
ground, on solid rock bottom, and surrounded by mound of
earth and stone, for $\frac{1}{4}$ sec. cor.. mkd. on brass cap $\frac{1}{4}$ S 9 in
N. half; and S 16 in S. half; from which
A pinon pine, 16 ins. dia., bears N.54°W., 11 lks.
dist.. mkd. $\frac{1}{4}$ S 9 B T.
A pinon pine, 8 ins. dia., bears S.69°W., 23 lks.
dist.. mkd. $\frac{1}{4}$ S 16 B T.
- 41.97 Top of point, 30 ft. above swale, bears N.20°W. and S.20°E.
- 51.00 Top of ridge, bears NW and SE. Desc.
- 71.37 The cor. of secs. 8 and 9.
The entire mile is composed of high ridges with steep
slopes, not much rock. The soil is clay and sandy, hard
and dry, subsoil, clay and gravel. Heavy cedar and pinon
pine timber on entire mile and some sage brush and oak
brush, scattering patches of grass.
Mountainous land, or land covered with heavy timber, 71.37
chs.

Subdivision of T.34 N., R.8 W.-continued.

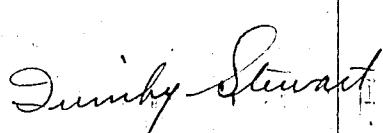
Chains	September 2, 1910: I begin at the cor. of secs. 4, 5, 8, and 9, heretofore described. Thence I run S.89°40' E., on a random line bet. secs. 4 and 9. Set temp. $\frac{1}{4}$ sec. cor. Intersect N. and S. line, 7.47 chs. South of the cor. of secs. 3, 4, 9, and 10, heretofore described. Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground, for closing cor. of secs. 4 and 9, mkd. on brass cap T 34 S R 8 W in N half. C C S 5 S 10 in E half. S 9 in SW.; and S 4 in NW quadrants; from which A pinon pine, 7 ins. dia., bears S.23°W., 26 lks. dist.. mkd. T 34 S R 8 W S 9 B T. A pinon pine, 8 ins. dia., bears N.29°W., 28 lks. dist.. mkd. T 34 S R 8 W S 4 B T. Note: I destroy all marks on the cor. of secs. 3, 4, 9, and 10, which pertain to secs. 4 and 9. Thence I run N.89°40' W., on a true line bet. secs. 4 and 9. Over mountainous land; through heavy cedar and pinon pine timber. Desc. gradually. 6.30 Wash, 50 lks. wide, 2 ft. deep, course S.40°W. 10.30 Top of spur, 20 ft. above wash, bears N.30°E. and S.30°W. Desc. 20.80 Begin abrupt descent over volcanic rocks, bears NW and SE. 28.00 Top of ledge, 50 ft. high, bears NW and SE. 50.00 Foot of steep descent, 300 ft. below spur, bears NW and SE. Leave volcanic rocks, bears NW and SE. Enter dense sage brush, bears NW and SE. Leave heavy and enter scattering timber, bears NW and SE. Desc. gradually.
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Subdivision of T.34 S., R.8 W.-Continued.

Chains

- 40.00 Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for $\frac{1}{2}$ sec. cor.. mkd.on brass cap $\frac{1}{4}$ S 4 in N half and S 9 in S half; from which
- A cedar, 12 ins. dia., bears N.8°30'W., 55 lks. dist.. mkd. $\frac{1}{4}$ S 4 B T.
 - A pinon pine, 5 ins. dia., bears S.50°W., 35 lks. dist.. mkd. $\frac{1}{4}$ S 9 B T.
- 41.00 Wash from canon, 60 lks. wide, 4 ft. deep, course NW.
- 51.00 Old road, bears NE and SW.
- 71.23 The cor.of secs.4,5,8, and 9.
- E.20.80 chs. over gently rolling mountain top, sloping gradually to the west. Soil, clay and sandy loam, gravelly subsoil, heavy cedar and pinon pine timber . Next 9.20 chs. is a steep west slope of mountain covered with volcanic rocks. W.41.25 chs. is in the foot hills gently rolling and sloping to the west.gravelly soil, 2 ft. deep, subsoil cemented gravel and clay.dense sage , scattering cedar and pinon pine timber.
- Mountainous or heavily timbered land, or land covered with dense undergrowth, 71.23 chs.

September 2, 1910.



Instrumentman G.L.O.

Subdivision of T.54.S., R.8 W.-Continued.

Chains

August 29, 1910: At 7 h. 1 m. a.m., l.m.t., I set off $37^{\circ}49'N.$
on the lat.arc; $9^{\circ}35'W.$, on the decl.arc; and determine a
meridian with the solar, at the cor. of secs. 31 and 32.,
on S.bdy. of Tp., heretofore described.
Thence I run
 $N.0^{\circ}9'W.$, bet. secs. 31 and 32.
Over mountainous land; through heavy cedar and pinon pine
timber and scattering oak and buck brush.
Desc.
.60 Bottom of ravine, 30 ft. deep, course SW.
Asc. abruptly.
1.80 Top of steep ascent, bears NE and SW.
Asc. gradually.
10.00 Top of ridge, 150 ft. above ravine, bears N.15°E. and S.15°
W.
Desc.
15.90 Bottom of hollow, 100 ft. below ridge, course S.75°W.
Asc.
25.00 Top of spur, 60 ft. above hollow, bears N.75°E. and S.75°W.
Desc.
26.50 Bottom of hollow, 85 ft. below spur, course S.55°W.
Asc.
27.25 Top of spur, 40 ft. above hollow, bears N.55°E. and S.55°
W.
Desc.
29.00 Bottom of hollow, 75 ft. below ridge, course SW.
Asc. abruptly.
40.00 Top of ridge, 300 ft. above hollow, bears NE and SW.
Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the
ground, for $\frac{1}{2}$ sec.cor. mkd. on brass cap $\frac{1}{2}$ S 31 in W half
and S 32 in E half; from which
A pinon pine, 16 ins. dia., bears S.33°E., 27 lbs.
Sict.. mkd. A S 32 E.T.

Subdivision of T.34 S., R.8 W.--Continued.

Chains		August 29, 1910.
		August 30, 1910: At 7 h 1 m a.m., l.m.t., I set off $37^{\circ}49'N.$, on the lat.arc; $9^{\circ}14'N.$, on the decl.arc; and determine a meridian with the solar, at the cor.of secs.29,30,31, and 32.
		Thence I run $S.89^{\circ}40'E.$, on a random line bet.secs.29 and 32.
40.00	Set temp. $\frac{1}{4}$ sec.cor.	
79.60	Intersect N.and S.line, at the cor of secs.28,29,32, and 33.	
	Thence I run $N.89^{\circ}40'W.$, on a true line bet.secs.29 and 32.	
	Over mountainous land; through heavy timber and scattering undergrowth.	
	Asc.	
2.50	Top of ridge, 40 ft.above sec.cor., bears $N.15^{\circ}W.$ and $S.15^{\circ}E.$	
	Desc.	
6.00	Bottom of swale, 75 ft.below ridge, course S.	
	Asc.	
11.00	Top of ridge, 75 ft.above swale, bears N.and S.	
	Desc.	
38.00	Top of sandstone ledge 100 ft.high, bears $N.30^{\circ}E.$ and $S.30^{\circ}W.$	
38.20	Bottom of canon, 300 ft.below ridge, course $S.80^{\circ}W.$, comes from $N.30^{\circ}E.$	
	Asc.	
39.90	Set an iron post, 3 ft.long, 1 in.in dia., 14 ins.in the ground, on bed rock.; and surrounded by mound of earth and stone, for $\frac{1}{4}$ sec.cor.mkd.on brass cap $\frac{1}{4}$ S 29 in N half and S 32 in S half;from which	

Subdivision of T.34 S., R.8 W.-Continued.

Chains	A pinon pine, 7 ins.dia., bears S.47°W., 11 lks. dist..mkd. 1 S 31 B T.
50.00	Top of ridge,bears E.and W. Desc. Aug.29,1910:At noon,sky is overcast,solar observations impossible
56.00	Bottom of swale,100 ft.below ridge,course E. Asc.abruptly over ledges.
66.00	Top of ridge,100 ft.above swale,bears N.40°E.and S.40°W. Desc.abruptly,leave ledges.
72.80	Ledge,100 ft.high,bears E.and W.
74.20	Foot of above ledge,bears E.and W.
75.00	Foot of steep descent,bears E.and W. Desc.gradually.
80.00	Point 400 ft. below ridge. Set an iron post,5 ft.long,2 ins.in dia.,24 ins.in the ground,for cor.of secs.29,30,31, and 32,mkd.on brass cap T 34 S 30 in NW. R 8 W S 29 in NE. S 32 in SE.;and S 31 in SW.quadrants;from which A pinon pine,12 ins.dia.,bears N.55°E.,30 lks. dist..mkd.T 34 S R 8 W S 29 B T. A pinon pine,6 ins.dia.,bears S16°30'E.,26 lks. dist..mkd.T 34 S R 8 W S 32 B T. A pinon pine,8 ins.dia.,bears S.52°31'W.,41 lks. dist..mkd.T 34 S R 8 W S 31 B T. A cedar,6 ins.dia.,bears N.1°W.,35 lks. dist..mkd.T 34 S R 8 W S 30 B T. S.40.00 chs.is somewhat rolling hills and hollows,sloping and draining southward into Parowan canon.Soil sandy clay from 20 ins.to 3 ft.deep,hard clay subsoil.N.40.00 chs. broken ridges and hollows with steep slopes and rocky. Soil,sandy ,dry,with sandstone subsoil.Heavy timber,cedar and pinon pine on entire mile.Scattering oak and buck brush on entiré mile.A very little grass . Mountainous or heavily timbered land,80.00 chs.

Subdivision of T.34 S., R.8 W.-Continued.

Chains	A yellow pine, 10 ins. dia., bears N.55°W., 51 lks. dist. mkd. $\frac{1}{4}$ S 29 B T.
	A cedar, 16 ins. dia., bears S.65°E., 67 lks. mkd. $\frac{1}{4}$ S 32 B T.
	August 30, 1910: At this cor. I set off 9°08' N., on the decl. arc; and at 0 h 01 m p.m., l.m.t., I observe the sun on the meridian, the resulting lat. is 37°49' N., which is the proper lat. nearly.
43.00	Top of spur, 75 ft. above canon, bears N. and S. Desc.
44.00	Bottom of swale, 75 ft. below spur, course S. Asc.
45.00	Top of spur, 40 ft. above swale, bears N. and S. Desc.
53.25	Top of sandstone ledge, 40 ft. high, bears N. and S.
55.80	Bottom of hollow, 50 ft. below spur, course S.. Asc.
57.40	Top of spur, 40 ft. above hollow, bears N. and S. Desc.
61.50	Enter dense oak brush, bears N. and S.
64.75	Old road, bears N.40°W. and S.40°E.
70.00	Wash, 40 lks. wide, 4 ft. deep, in bottom of Dry Canon, 300 ft. below spur, course N.40°W. Asc.
73.00	Leave oak brush, bears N.40°W. and S.40°E.
75.00	Top of spur, 20 ft. above canon, bears N.10°E. and S.10°W. Desc.
77.00	Swale, 25 ft. below spur, course N.30°E. Asc. abruptly.
79.80	The cor. of secs. 29, 30, 31, and 32. 150 ft. above swale. The entire mile broken and rough. Soil red sand and clay on sandstone. Timber, cedar and pinon pine. Undergrowth, oak and sage brush.

Subdivision of T.34 S., R.8 W.-Continued.

Chains

A very little grass.

Mountainous or heavily timbered land; or land covered with dense undergrowth, 79.80 chs.

August 30, 1910.

August 31, 1910: At 7 h 0 m a.m., l.m.t., I set off $57^{\circ}49'N.$ on the lat.arc; $8^{\circ}52'W.$, on the decl.arc; and determine a meridian with the solar, at the cor.of secs.29,30,31, and 32. Thence I run

$N.89^{\circ}40'W.$, on a random line betsecs.30 and 31.

40.00 Set temp. $\frac{1}{4}$ sec.cor.

73.40 Intersect W.bdy.of Tps., 61 lks. $N.0^{\circ}20'E.$, of the cor.of secs.30 and 31, heretofore described. Set an iron post, 3 ft.long, 2 ins.in dia., 12 ins.in the ground, on solid rock, and surrounded by mound of earth and stone, for closing cor.of secs.30 and 31, mkd.on brass cap

T 34 S in N half.

C C R 9 W S 25 S 36 in W half.

S 30 in NE.; and

R 8 W S 31 in SE.quadrants; from which

A pinon pine, 5 ins.dia., bears $N.75^{\circ}E.$, 49 lks. dist..mkd.T 34 S R 8 W S 30 B T.

A pinon pine, 7 ins.dia., bears $S.32^{\circ}E.$, 18 lks. dist..mkd.T 34 S R 8 W S 31 B T.

Note:I destroy all marks on the cor.of secs.30 and 31 which pertain to secs.30 and 31, marks pertaining to secs.25 and 36 have already been destroyed.

Thence I run

$S.89^{\circ}40'E.$, on a true line betsecs.30 and 31.

Over mountainous land; through heavy cedar and pinon pine

Subdivision of T.34 S., R.8 W. Continued.

Chains

- timber and scattering sage brush.
- Desc. abruptly.
- 6.50 Foot of descent, 200 ft. below sec.cor., bears N.20°W. and S.20°E.
- Leave timber and enter dense oak and maple undergrowth, bears N.20°W. and S.20°E.
- Enter bottom of Parowan Canon, bears N.20°W. and S.20°E.
- Desc. gradually.
- 7.10 Road from Parowan to Panguitch, bears N.20°W. and S.20°E.
- 7.15 Telephone line from Parowan to Panguitch, bears N.20°W. and S.20°E.
- 12.50 Parowan Creek, 20 lks. wide, 1 ft. deep, rocky bottom, clear water, rapid current, course N.
- 16.80 Leave canon bottom, bears N.20°W. and S.20°E.
- Leave undergrowth, bears N.20°W. and S.20°E.
- Enter heavy timber, bears N.20°W. and S.20°E.
- Asc. abruptly.
- 26.10 Top of point or spur, 300 ft. above canon, bears NW and SE.
- Continue gradual ascent.
- 33.40 Set an iron post, 3 ft. long, 1 in. in dia., 13 ins. in the ground, on solid rock, and surrounded by mound of earth and stone, for a sec.cor.. mkd. on brass cap $\frac{1}{4}$ S 30 in N half; and S 31 in S half; from which
- A pinon pine, 5 ins. dia., bears N.30°W., 29 lks. dist.. mkd. $\frac{1}{4}$ S 30 B T.
- A mahogany, 6 ins. dia., bears S.40°E., 13 lks. dist.. mkd. $\frac{1}{4}$ S 31 B T.
- August 31, 1910: At this cor. I set off 8°46'N., on the decl. arc; and at 12 h. 0 m. M., l.t., I observe the sun on the meridian, the resulting lat. is 37°49'N., which is the proper lat. nearly.
- 35.60 Bottom of Gulch 50 ft. above spur, course NW.
- Asc. abruptly over rocks and boulders.

Subdivision of T.54 S., R.8 W.-Continued.

Directions

- 51.60 Top of ridge, 500 ft. above gulch, bears N. and S.
Desc. abruptly.
- 71.70 Bottom of ravine, 600 ft. below ridge, course NE.
Asc. abruptly.
- 72.20 Top of spur, 20 ft. above ravine, bears N. and S.
Desc.
- 73.40 The cor. of secs. 29, 30, 31, and 32, 30 ft. below spur.
This entire mile is exceptionally rough and broken, the ridges are high and the slopes are steep and rocky; it is too steep and rocky even for cattle to graze on it. Soil red sand and clay in patches, but mostly rock. Timber cedar and pinon pine. Undergrowth scattering sage brush except in Parowan canon bottom, which is oak and maple.
A very little grass
Mountainous or heavily timbered land, or land covered with dense undergrowth, 73.40 chs.

August 31, 1910.

September 1, 1910: At 7 h 0 m a.m., l.m.t., I set off $37^{\circ}49'N.$, on the lat.arc; $82^{\circ}31'W.$, on the decl.arc; and determine a meridian with the solar, at the cor.of secs. 29, 30, 31, and 32. Then do I run
 $7.0^{\circ}11'W.$, bet. secs. 29 and 30.
 Over mountainous land; through heavy timber and scattering undergrowth.
 Desc.

- 2.15 Top of sloping conglomerate ledge, 75 ft. high, bears NE and SW.
- 2.40 Feet of ledge, bears NE and SW.
- 4.65 Ravine, 100 ft. deep, course N. $50^{\circ}E.$
Asc.
- 6.75 Top of spur, 20 ft. above ravine, bears N. and W.

Subdivision of T.34 S., R.8 W.-Continued.

Chains	
	Desc. .
9.00	Foot of descent, 40 ft. below spur, bears N.40°W. and S.40°E. Enter bottom of Dry Canon.
13.56	Wash, 50 lks. wide, 4 ft. deep, in canon, course N.40°W. Old road in bottom of wash, bears N.40°W. and S.40°E.
14.00	Leave canon bottom, bears N.40°W. and S.40°E. Asc.
30.50	Foot of series of precipitous sandstone ledges, bears E and W.
35.80	Top of ledges, 400 ft. above foot, bears E. and W.
37.80	Top of ridge, 600 ft. above Dry canon, bears E. and W. Desc. abruptly.
40.00	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor.. mkd. on brass cap $\frac{1}{4}$ S 30 in W half and S 29 in E half; from which A pinon pine, 8 ins. dia., bears N.40°E., 35 lks. dist.. mkd. $\frac{1}{4}$ S 29 B T. A red cedar, 12 ins. dia., bears N.20°W., 14 lks. dist.. mkd. $\frac{1}{4}$ S 30 B T.
48.00	Bottom of canon, 400 ft. below ridge, course W. Asc. abruptly.
68.00	Top of ridge, 500 ft. above canon, bears E. and W. Desc.
79.00	Head of hollow, 50 ft. below ridge, course SW. Asc.
80.00	Set an iron post, 3 ft. long, 2 ins. in dia., 14 ins. in the ground, on bed rock, and surrounded by mound of earth and stone, for cor. of secs. 19, 20, 29, and 30, mkd. on brass cap T 34 S S 19 in NW. R 8 W S 20 in NE. S 29 in SE.; and S 30 in SW. quadrants; from which A pinon pine, 6 ins. dia., bears N.42°30'E., 31 lks

Subdivision of T.34 S., R.8 W.-Continued.

Chains

dist..mkd.T 34 S R 8 W S 20 B T.

A pinon pine, 15 ins. dia., bears S.30°E., 26 lks.

dist..mkd.T 34 S R 8 W S 29 B T.

A pinon pine, 18 ins. dia., bears S.50°W., 56 lks.

dist..mkd.T 34 S R.8 W S 30 B T.

A pinon pine, 18 ins. dia., bears N.68°W., 56 lks.

dist..mkd.T 34 S R 8 W S 19 B T.

Entire mile very rough and steep, several high ledges.

Soil, sand and clay fro 4 to 8 ins. deep, mixed with gravel
on solid rock. Timber, cedar and pinon pine. Undergrowth,
sage brush.

Mountainous or heavily timbered land, 80.00 chs.

September 1, 1910: At this cor. I set off 8°25'N., on the
decl. arc; and at 12^h0.0 m ^yM., 1.m.t., I observe the
sun on the meridian, the resulting lat. is 37°50'N., which
is the prper lat. nearly.

S.89°40'E., on a random line bet.secs.20 and 29.

40.00 Set temp. & sec.cor.

79.60 Intersect E. and S.line, 12 lks.N. of the cor.of secs.

20, 21, 28, and 29.

Thence I run

E.89°55'W., on a true line bet.secs.20 and 29,

Over mountainous land; through heavy timber and scattering
undergrowth.

Asc.

3.25 Top of spur, 50 ft. above cor., bears NW and SE.

Desc.

11.75 Bottom of canon, 100 ft. below spur, course N.

Asc.

27.00 Top of ridge, 700 ft. above canon, bears N. and S.

Subdivision of T.34 S., R.8 W.0-Continued.

Chains	
	Desc.
39.80	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor.. mkd. on brass cap $\frac{1}{4}$ S 20 in N half and S 29 in S half; from which A pinon pine, 14 ins. dia., bears N.13°W., 34 lks. dist.. mkd. $\frac{1}{4}$ S 20 B.T. A pinon pine, 16 ins. dia., bears S.53°W., 14 lks. dist.. mkd. $\frac{1}{4}$ S 29 B.T.
52.50	Head of hollow, 300 ft. below ridge, course South.. Asc.
55.50	Top of spur, 75 ft. above hollow, bears N.20°E. and S.20°W.
79.60	The cor. of secs. 19, 20, 29, and 30, 100 ft. below spur. E.55, 60 chs. is broken country with steep slopes draining northward. Soil, heavy loam from 8 to 12 ins. deep, heavy cedar and pinon pine timber and considerable oak and buck brush undergrowth. W.24.00 chs. is more rolling tops of mountain. white sandstone formation. Soil, shallow sand timber cedar and pinon pine and yellow pine. Considerable undergrowth. Mountainous or heavily timbered land, 79.60 chs.
	September 1, 1910.
	September 2, 1910: At 7 h 0 m a.m., l.m.t., I set off 37°50' N., on the lat.arc; 8°09'N., on the decl.arc; and determine a meridian with the solar, at the cor. of secs. 19, 20, 29, and 30. Thence I run Knowing from retracement of west bdy. that the line will not close within limits; W.89°40'W., on a true line bet. secs. 19 and 30. over mountainous land; through heavy cedar and pinon pine

Subdivision of T.34 S., R.8.W.-Continued.

Chains	
	timber.
	Asc.
5.00	Top of ridge, 40 ft. above cor., bears N.60°E. and S.60°W. Desc.
8.70	Desc. abruptly, bears N.60°E. and S.60°W.
35.00	Foot of steep descent, 700 ft. below ridge, bears N.60°E. and S.60°W.. Desc. gradually.
40.00	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for $\frac{1}{4}$ sec.cor.. mkd.on brass cap $\frac{1}{4}$ S 19 in N half and S 30 in S half; from which A cedar, 8 ins.dia., bears N.40°W., 45 lks. dist..mkd. $\frac{1}{4}$ S 19 B T. A cedar, 7 ins.dia., bears S.29°W., 25 lks. dist..mkd. $\frac{1}{4}$ S 30 B T.
54.25	Bottom of hollow, 100 ft. below $\frac{1}{4}$ sec.cor., course S.60°W. Asc.
59.00	Wood road, bears N.50°E. and S.50°W.
62.00	Top of spur, 50 ft. above hollow, bears N. and S. Desc.
73.00	Intersect W.bdy.of Tp., 7.68 chs.N.0°11'W., of cor.of secs. 19 and 30, heretofore described, Set an iron post, 3 ft. long, 2 ins. in the dia., 24 ins. in the ground, for closing cor.of secs.19 and 30,mkd.on brass cap T 34 S in N half. C C R 9 W S 24 S 25 in W.half. S 19 in NE.;and S 30 in SE.quadrants;from which A pinon pine, 5 ins.dia., bears N.77°E., 55 lks. dist..mkd.T 34 S R 8 W S 19 B T. A pinon pine, 6 ins.dia., bears S.66°E., 62 lks. dist..mkd.T 34 S R 8 W S 30 B T.
	Note:I destroy all marks on the cor.of secs.19 and 30

Subdivision of T.34 S., R.8 W., Continued.

Chains

which pertain to secs. 19 and 30. X
 E. 8.70 chs. is on mountain top, rolling. Soil, clay loam, 1 ft. deep, on clay subsoil. Cedar and pinon pine timber.
 Next 27.30 chs. is on steep west slope of mountain. Soil, red sand and clay, 3 to 6 ins. deep, cedar and pinon pine timber more scattering. W. 38.00 chs. in the foot hills W. slope, soil clay mixed with rock and gravel, 2 ft. deep, subsoil, gravel and clay. Timber, cedar and pinon pine. Undergrowth, sage brush.
 Mountainous or heavily timbered land, 75.00 chs.
 September 2, 1910: At this cor. I set off 8°03' N., on the decl. arc; and at 12h 0 m. M. . . . , l.m.t., I observe the sun on the meridian, the resulting lat. is 37°50' N., which is the proper lat. nearly.

Note: Knowing from retracement of subdivision that the line bet. secs. 19 and 20 will not close within limits;

I run

N. 0° 1' W., on true line bet. secs. 19 and 20.

Over mountainous land; through heavy timber

Arc.

5.00 Top of ridge, 40 ft. above sec. cor., bears E. and W.

Desc.

7.50 Begin abrupt descent, bears E. and W.

Enter scattering mahogany and buck brush, bears E. and W.

18.00 Bottom of canon, 600 ft. below ridge, course W.

Leave undergrowth, bears E. and W.

Arc. over rough sandstone ledges.

26.00 Top of ridge, 500 ft. above canon, bears E. and W.

Leave ledges, bears E. and W.

Desc.

36.00 Foot of steep descent, 500 ft. below ridge, bears NE and SW.

Subdivision of T.34 S., R.8 W.-Continued.

Chains	
	Desc. gradually.
40.00	Set an iron post, 5 ft. long, 1 in. in dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor.. mkd. on brass cap $\frac{1}{4}$. S 19. in W half and S 20 in E half; from which
	A pinon pine, 6 ins. dia., bears E., 41 lks. dist. dist.. mkd. $\frac{1}{4}$ S 20 B T.
	A pinon pine, 12 ins. dia., bears S.49°W., 40 lks. dist.. mkd. $\frac{1}{4}$ S 19 B T.
45.00	Bottom of hollow, 600 ft. below ridge, course W. Asc.
47.00	Top of spur, 50 ft. above hollow, bears NE and SW. Desc.
49.00	Bottom of hollow, 50 ft. below ridge, course SW. Asc.
52.00	Top of ridge, 75 ft. above hollow, bears NE and SW. Desc.
58.50	Head of hollow, 40 ft. below ridge, course SW. Asc.
72.80	Intersect E. and W. line, 6.86 chs. ^{S.89°44'W.} of cor. of secs. 18 and 19, heretofore described. Set an iron post, 3 ft. long, 2 ins. dia., 24 ins. in the ground, for closing cor. of secs. 19 and 20, mkd. on brass cap C C T 34 S R 8 W S 18 in N half. S 20 in SE.; and S 19 in SW. quadrants; from which A pinon pine, 5 ins. dia., bears S.40°E., 12 lks. dist.. mkd. T 34 S R 8 W S 20 B T. A pinon pine, 6 ins. dia., bears S.36°W., 26 lks. dist.. mkd. T 34 S R 8 W S 19 B T. Note: I destroy marks on the cor. of secs. 18 and 19 which pertains to sec. 19. S.36.00 chs. over steep rough mountain. soil, sand and clay 3 to 6 ins. deep, subsoil, clay and rock. Timber, cedar and

Subdivision of T.34 S., R.8 W.-Continued.

Chains

pinon pine.Undergrowth,mahogany and buck brush.
 N.36.80 chs.is more rolling with a deeper and richer
 clay and sandy soil,Timber cedar and pinon pine.
 Not much grass .
 Mountainous or heavily timbered land,or land covered with
 dense undergrowth,72.80 chs.

September 2, 1910.

Instrumentman, G.T.O.

General Description.

This township is situated in a range of mountains east of Parowan Valley, general trend of the range is northeast and southwest, with canons which have cut through about at right angles to the range and run westerly into Parowan valley. The formation being generally of soft sandstone these canons have cut deep gorges into the mountain and in many places leave precipitous ledges, and many boulders and rocks; so that much of the country especially in the extreme north and extreme south of the township is too rough to be grazed by cattle or sheep. The central portion while rough and steep makes fairly good grazing for sheep.

The township is poorly watered. Parowan Creek crosses the extreme southwest corner and Red Creek barely comes into the township at the north bdy.

There is an abundance of cedar and pinon pine timber all over the township suitable only for fuel. There is also

Subdivision of T.34 S., R.8 W.-Continued.

Chains

some little yellow, white, and red pine timber, suitable for saw timber, but not in sufficient quantities to be of commercial value.

There are no settlers in the township.

There is some land suitable for farming purposes along the foothills in the edge of Parowan Valley, but there is not much chance of getting water for it.

We found no indications of mineral in the township.

*John R. Stewart
Quincy Stewart
INSTRUMENTMAN G.L.O.*

September 2, 1910.

TRANSITMAN

FINAL OATHS OF DEPUTY SURVEYOR AND HIS ASSISTANTS.

LIST OF NAMES.

A list of the names of the individuals employed by Quinby Stewart

Transitman, United States ~~Deputy Surveyor~~, to assist in running, measuring, and marking the lines and corners described in the foregoing field notes of the survey of Subdivision T. 34 S., R. 8 W. S.L.B. & M., Utah,

showing the respective capacities in which they acted:

Verne O. Nelson, Chainman.

Ruban W. Riley, Chainman.

Nicholas L. Sheffield, Moundman.

Isaac R. Hayes, Moundman.

Isaac R. Hayes, Axman.

Isaac R. Hayes, Axman.

Isaac R. Hayes, Flagman.

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted Quinby Stewart, Transitman

United States Deputy Surveyor, in surveying all those parts or portions of the Subdivision T. 34 S., R. 8 W.

of the salt

Lake Base and meridian, State of Utah, which are represented in the foregoing field notes as having been surveyed by him and under his direction; and that said survey has been in all respects, to the best of our knowledge and belief, well and faithfully surveyed, and the corner monuments established, according to the instructions furnished by the United States Surveyor General for Utah.

Verne O. Nelson, Chainman.

Ruban W. Riley, Chainman.

Nicholas L. Sheffield, Moundman.

Isaac R. Hayes, Axman.

Isaac R. Hayes, Flagman.

Subscribed and sworn to before me this 2nd }
day of September 1910, 1910 }



Quinby Stewart

Instrumentman G.I.O.

TRANSITMAN

FINAL OATH OF UNITED STATES DEPUTY SURVEYOR.

I, Quinby Stewart, United States Deputy Surveyor, do solemnly swear that, in pursuance of a contract received from Thomas Hull, United States Surveyor General for Utah, bearing date of the 6th day of August, 1910, I have well, faithfully, and truly, in my own proper person, and in strict conformity with the instructions furnished by the United States Surveyor General for Utah, the Manual of Surveying Instructions, and the laws of the United States, surveyed all those parts or portions of the subdivisional lines in Township No. 34 South, Range No. 8 West.

of the Salt Lake Base and meridian, in the State of Utah, which are represented in the foregoing field notes as having been surveyed by me, and under my direction; and I do further solemnly swear that all the corners of said survey have been established and perpetuated in strict accordance with the Manual of Surveying Instructions, and the special written instructions of the United States Surveyor General for Utah and in the specific manner described in the field notes, and that the foregoing are the original field notes of such survey.

Quinby Stewart
United States Deputy Surveyor
United States Transitman.

Subscribed by said Quinby Stewart, and sworn to before me)

this 7th day of June, 1912, 1900

Thomas Hull
U.S. Surveyor-General

for Utah.

APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

, 190

The foregoing field notes of the survey of

executed by

under his contract No., dated , 190 , having been critically examined, and the necessary corrections and explanations made, the said field notes, and the surveys they describe, are hereby approved.

United States Surveyor General

I certify that the foregoing transcript of the field notes of the above-described surveys in , has been correctly copied from the original notes on file in this office.

United States Surveyor General

Transitman
 FINAL OATHS OF ~~DEPUTY SURVEYOR~~ AND HIS ASSISTANTS.

LIST OF NAMES.

A list of the names of the individuals employed by John R. Stewart,
Transitman, United States Deputy Surveyor, to assist in running, measuring, and
 marking the lines and corners described in the foregoing field notes of the survey of Subdivision
 T. 34 S., R. 8 W., S.L.B. & M., Utah,
 showing the respective capacities in which they acted:

Frank S. Allen, Chainman.
R. Bert Carter, Chainman.
Harvey W. Elliott, Moundman.
Alton Ivie, Moundman.
Alton Ivie, Axman.
Alton Ivie, Axman.
Alton Ivie, Flagman.

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted John R. Stewart,
Transitman, United States Deputy Surveyor, in surveying all
 those parts or portions of the Subdivision T. 34 S., R. 8 W.,

of the Salt
 Lake Base and meridian, State Utah, which are represented
 in the foregoing field notes as having been surveyed by him and under his direction; and that said survey
 has been in all respects, to the best of our knowledge and belief, well and faithfully surveyed, and the
 corner monuments established, according to the instructions furnished by the United States Surveyor
 General for Utah.

Frank S. Allen, Chainman.
R. Bert Carter, Chainman.
Harvey W. Elliott, Moundman.
Alton Ivie, Moundman.
Alton Ivie, Axman.
Alton Ivie, Axman.
Alton Ivie, Flagman.

Subscribed and sworn to before me this 2nd
 day of September 1910. 1910

John R. Stewart
 Instrumentman G.L.O.



TRANSITMAN
FINAL OATH OF UNITED STATES DEPUTY SURVEYOR.

Transitman

I, John R. Stewart, United States Deputy Surveyor, solemnly swear that, in pursuance of special instructions received from Thomas Hull United States Surveyor General for Utah, bearing date of the 6 day of August, 1910, I have well, faithfully, and truly, in my proper person, and in strict conformity with the instructions furnished by the United States Surveyor General for Utah, the Manual of Surveying Instructions, and the laws of the United States, surveyed all those parts or portions of the subdivisional lines in Township No. 34 South, Range No. 8 West

of the Salt Lake

Base and meridian, in the State of Utah, which are represented in the foregoing field notes as having been surveyed by me, and under my direction; and I do further solemnly swear that all the corners of said survey have been established and perpetuated in strict accordance with the Manual of Surveying Instructions, and the special written instructions of the United States Surveyor General for Utah, and in the specific manner described in the field notes, and that the foregoing are the original field notes of such survey.

United States Deputy Surveyor
United States Transitman

Subscribed by said John R. Stewart, and sworn to before me this 5 day of April, 1912.

U.S. Surveyor-General
for Utah.

APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Salt Lake City, Utah, January 7, 1914.

The foregoing field notes of the survey of the subdivisional lines of Township No. 34 South, Range No. 8 West of the Salt Lake Base and Meridian, Utah,

executed by John R. Stewart and Quinby Stewart under their special instructions dated August 6, 1910, 1910, having been critically examined, and the necessary corrections and explanations made, the said field notes, and surveys they describe, are hereby approved.

United States Surveyor General

I certify that the foregoing transcript of the field notes of the above-described surveys in _____ has been correctly copied from the original notes on file in this office.

United States Surveyor General

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Filed Feb. 14, 1911.
WSH.

4-679

BOOK A-384

C.

FIELD NOTES

J. J. B.
OF THE SURVEY OF THE

EAST BOUNDARY

OF

TOWNSHIP NO. 33 SOUTH, RANGE NO. 8 WEST,

And

RETRACEMENT FRACTIONAL SOUTH, EAST, AND NORTH BOUNDARIES

OF

TOWNSHIP NO. 33 SOUTH, RANGE NO. 8 WEST

Of the SALT LAKE BASE AND Meridian,

In the State of

UTAH

EXECUTED BY

JOHN E. STEWART AND QUINCY STEWART

Transitmen

in the capacity of U. S. Surveyors, under instructions dated Aug. 6, 1910,
issued by the United States Surveyor General to govern surveys included in
group No. 1, which were approved by the Commissioner of the General Land
Office, Aug. 25, 1910, pursuant to authority contained in the Act of
Congress dated , 1910.

Survey commenced September 2, 1910.

Survey completed September 10, 1910.

NAMES AND DUTIES OF ASSISTANTS.

Frank S. Allen,	Chainman.
R. Bert Carter,	Chainman.
Ruben W. Riley,	Moundman.
Isaac R. Hayes,	Axman.
Verne O. Nelson,	Chainman.
Alton Ivie,	Chainman.
Harvey W. Elliott,	Moundman.
Nicholas L. Sheffield,	Axman.
Milo Nelson,	Flagman.

INDEX DIAGRAM.

Township 33 *South*, *Range* 8 *West*

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INDEX DIAGRAM.

Township 33 South, Range 8 West

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31	32	33	34	35	36	15 2

Meanders Page

PRELIMINARY OATHS OF ASSISTANTS.

WE, Frank S. Allen

and R. Bert Carter

do solemnly swear that we will well and faithfully execute the duties of chainmen; that we will level chain upon even and uneven ground, and plumb the tally pins, either by sticking or dropping the same; we will report the true distances to all notable objects, and the true lengths of all lines that we assay measuring, to the best of our skill and ability, and in accordance with instructions given us, in the survey E.bdy.T.33 S., R.8 W.; E.bdy. and Retracement N., S., & E.bdys.T.33 S., R.7 W.bdy. and Retracement E&W. bdys.T.32 S., R.7 W.; and E.bdy. and Retracement S.bdy.T.32 S., R.6 W. S.L.B. & M., Utah.

Frank S. Allen

R. Bert Carter

Subscribed and sworn to before me this 2nd
day of September 1910, ~~max~~



John R. Stewart
Instrumentman G.L.O.

WE, I., Ruban W. Riley

~~max~~

do solemnly swear that ~~we~~ will well and truly perform the duties of moundman in the establishment of corners, according to the instructions given ~~me~~ to the best of ~~our~~ my skill and ability, in the survey E.bdy.T.33 S., R.8 W.; E.bdy. and Retracement N., S., and E.bdys.T.33 S., R.7 W.bdy. and Retracement E&W. bdys.T.32 S., R.7 W.; and E.bdy. and Retracement S.bdy.T.32 S., R.6 W. S.L.B. & M., Utah.

Ruban W. Riley, Moundman

Subscribed and sworn to before me this 2nd
day of September 1910, ~~max~~



John R. Stewart
Instrumentman G.L.O.

WE, I., Isaac R. Hayes

~~max~~

do solemnly swear that ~~we~~ will well and truly perform the duties of axman in the establishment of corners and other duties, according to instructions given ~~me~~ to the best of ~~our~~ my skill and ability, in the survey E.bdy.T.33 S., R.8 W.; E.bdy. and Retracement N., S., & E.bdys.T.33 S., R.7 W.bdy. and Retracement E&W. bdys.T.32 S., R.7 W.; and E.bdy. and Retracement S.bdy.T.32 S., R.6 W., S.L.B. & M., Utah.

Isaac R. Hayes, Axman

Subscribed and sworn to before me this 2nd
day of September 1910, ~~max~~



John R. Stewart
Instrumentman G.L.O.

I, William Carter

, do solemnly swear that I will well and truly perform the duties of flagman according to instructions given me, to the best of my skill and ability, in the survey of E.bdy. and Retracement E. and N.bdys.T.33 S., R.7 W.; and Retracement E. and W.bdys.T.32 S., R.7 W.

William Carter, Flagman

Subscribed and sworn to before me this 20th
day of September 1910, ~~max~~



John R. Stewart
Instrumentman G.L.O.

BOOK A-384

INDEX DIAGRAM.

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Meanders Page _____

PRELIMINARY OATHS OF ASSISTANTS.

WE, Verne O. Nelsonand Alton Ivie

do solemnly swear that we will well and faithfully execute the duties of chainmen; that we will level the chain upon even and uneven ground, and plumb the tally pins, either by sticking or dropping the same; that we will report the true distances to all notable objects, and the true lengths of all lines that we assist in measuring, to the best of our skill and ability, and in accordance with instructions given us, in the survey of Retracement N., S., and E. bdy. T.33 S., R.8 W.; Retracement N. bdy. T.33 S., R.7 W.; N. bdy. and Retracement N. bdy. T.32 S., R.7 W.; and Retracement N. bdy. T.32 S., R.6 W. S.L.B. & M., Utah.

Verne O. Nelson, ChainmanAlton Ivie

, Chainma

Subscribed and sworn to before me this 2nd

day of September 1910. maxI, Wm. Harvey W. Elliottmax

do solemnly swear that xx will well and truly perform the duties of moundman in the establishment of corners, according to the instructions given me to the best of xx skill and ability, in the survey of Retracement N., S., and E. bdy. T.33 S., R.8 W.; Retracement N. bdy. T.33 S., R.7 W.; N. bdy. and Retracement N. bdy. T.32 S., R.7 W.; and Retracement N. bdy. T.32 S., R.6 W. S.L.B. & M., Utah.

Harvey W. Elliott, Moundma

, Moundma

Subscribed and sworn to before me this 2nd

day of September 1910. maxWE, L. Nicholas L. Sheffieldmax

do solemnly swear that xx will well and truly perform the duties of axman in the establishment of corners and other duties, according to instructions given me to the best of xx skill and ability, in the survey of Retracement N., S., and E. bdy. T.33 S., R.8 W.; Retracement N. bdy. T.33 S., R.7 W.; N. bdy. and Retracement N. bdy. T.32 S., R.6 W. S.L.B. & M., Utah.

Nicholas L. Sheffield, Axma

, Axma

Subscribed and sworn to before me this 2nd

day of September 1910. maxI, Milo Nelson

, do solemnly swear that I will well and truly perform the duties of flagman according to instructions given me, to the best of my skill and ability, in the survey of N. bdy. T.32 S., R.7 W. Retracement N. bdy. T.32 S., R.7 W.; and Retracement N. bdy. T.32 S., R.6 W. S.L.B. & M., Utah.

Milo Nelson, Flagma

, Flagma

Subscribed and sworn to before me this 27th

day of September 1910. maxQuincy Stewart

Instrumentman G.L.O.

Retracement S.bdy.E.33 S., E.8 W.

Survey commenced September 2, 1910, and executed with a Young and Sons light mountain transit, No. 7382, with solar attachment. The horizontal limb is provided with two double verniers placed opposite to each other, reading to single minutes of arc; which is also the least count of the verniers of the latitude and declination arcs. The instrument was examined, tested on the meridian at Salt Lake City, found correct, and was approved by the surveyor general for Utah, on August 6, 1910.

At the cor. of secs. 1, 2, 35, and 36, on S.bdy. of Tp., latitude $37^{\circ}53'51''$ N., longitude $112^{\circ}40'54''$ W., At 8 h 47 m p.m., l.m.t., I observe Polaris at eastern elongation, in accordance with the Manual and mark a point thereof by a tack driven in a wooden plug set in the ground, 5.00 chs.N. of the cor.

September 2, 1910.

September 3, 1910: At 6 h 30 m a.m., l.m.t., I lay off the azimuth of Polaris, $1^{\circ}29.4'$ to the west, and mark the meridian thus determined by a cross on a stone firmly set in the ground; 5.00 chs.N. of the cor.

At 7 h 0 m a.m., l.m.t., I set off $37^{\circ}53'N.$, on the lat. arc; $7^{\circ}47'W.$, on the decl. arc; and mark the meridian determined by the solar, by cutting a small groove in the stone already set 5.00 chs.N. of the cor.; this mark falls 0.31 ins. east of the meridian established by Polaris observation; therefore I conclude, that the adjustments of the instrument are satisfactory.

Note: For complete test of instrument see notes of re-tracement Subdivision of E.33 S., E.8 W.

Retracement S.bdy.T.33 S., R.8 W.-Continued.

Chains	<p>From the cor.of secs.1,2,35, and 36, heretofore described.</p> <p>I run</p> <p>S.89°48'E., on a retracement line bet.secs.1 and 36.</p> <p>Over mountainous land; through heavy cedar and pinon pine timber and scattering sage brush.</p> <p>Asc.</p> <p>1.00 Foot of conglomerate ledge, 75 ft. high, bears NE and SW.</p> <p>4.25 Foot of sandstone ledge, 40 ft. high, bears N. and S.</p> <p>28.00 Leave heavy and enter scattering timber, bears N. and S.</p> <p>Enter dense undergrowth, bears N. and S.</p> <p>34.40 Fall 48 lks.S. of the 4 sec.cor.bet.secs.1 and 36, which is a granite stone, 7x12x6 ins., above ground, firmly set, and mkd.and witnessed as described by surveyor general.</p> <p>I destroy the old cor.and re-establish it in the same place as follows:</p> <p>Set an iron post, 3 ft.long, 1 in.in dia., 26 ins.in the ground, for $\frac{1}{2}$ sec.cor.mkd.on brass cap; S 56 in N half and S 1 in S half; and raise a mound of stone, 2 ft.base $1\frac{1}{2}$ ft.high,N.of cor.</p> <p>39.00 Top of ridge, 300 ft.above sec.cor., bears NW and SE.</p> <p>Desc.abruptly.</p> <p>48.00 Leave sage brush, bears N. and S.</p> <p>Enter heavy cedar and pinon pine timber, bears N. and S.</p> <p>62.00 Leave heavy timber, bears N. and S.</p> <p>Enter dense oak, service berry, and buck brush, bears N. and S.</p> <p>Foot of descent, 600 ft.below ridge, bears N. and S.</p> <p>Enter bottom of Red creek canon.</p> <p>64.25 Red creek, 8 lks.wide, 1 ft.deep, rocky bottom, course N.</p> <p>67.00 Canon road, bears N. and S.</p> <p>71.00 leave undergrowth, enter scattering timber, bears N. and S.</p> <p>Leave canon bottom, bears N. and S.</p> <p>Asc.over sandstone ledges.</p> <p>74.52 Fall 104 lks.S. of the cor.of Tps.33 S., Rs.7 and 8 W.,</p>
--------	---

Retracement S.bdy.T.33 S., R.8 W.-Continued.

Chains

which is a limestone, 10x12x10 ins., above ground, firmly set, and mkd. and witnessed as described by the surveyor general.

The course of this line is therefore N.89°24'E., 74.52 chs.

Land, mountainous.

Soil, red and white clay loam and sand; 2nd and 3rd rate.

Timber, cedar and pinon pine.

Undergrowth, oak, sage, and service berry.

Good grass for grazing.

Mountainous or heavily timbered land, or land covered with dense undergrowth, 74.52 chs..

September 3, 1910.

Retracement E.bdy.T.33 S., R.8 W.

September 10, 1910: At 6 h 57 m a.m., l.m.t., I set off 37°58'N., on the lat.arc; 5°11'W., on the decl.arc; and determine a meridian with the solar, at the cor.of secs. 1, 6, 7, and 12, on E.bdy.of Tp., heretofore described.

Thence I run

North, on retracement line bet.secs. 1 and 6.

Over mountainous land; through heavy cedar and pinon pine timber.

Asc.gradually.

1.60 Top of spur, 20 ft.above cor., bears N.60°W. and S.60°E.

Desc.

6.20 Gulch, 50 ft.below spur, course W.

Asc.

9.50 Top of spur, 100 ft.above gulch, bears E. and w.

Desc.

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BOOK A-564
Tracerement E.bdy.T.33 S., R.8 W.-Continued.

Chains

27.40 Bottom of swale, 60 ft. below spur, course W.

Asc.

32.60 Top of spur, 110 ft. above swale, bears N.70°W. and S.70

E.

Desc.

39.41 Fall 6 lks.E.of the $\frac{1}{4}$ sec.cor.bet.sec's.1 and 6, which is a conglomerate stone, 10x14x10 ins. above ground, firmly set, and mkd. and witnessed as described by the surveyor general. I destroy the old cor. and re-establish it in the same place as follows.

Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for $\frac{1}{4}$ sec.cor..mkd.on brass cap $\frac{1}{4}$ S 1 in W half and S 6 in E half; from which

A pinon pine, 6 ins. dia., bears N.46°E., 55 lks.
dist..mkd. $\frac{1}{4}$ S 6 B.T.

No other trees within limits; raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$ ft. high, W. of cor.

41.50 Bottom of hollow, 100 ft. below spur, course N.50°W.

Asc.

42.50 Top of spur, 40 ft. above hollow, bears E. and W.

Desc.

45.00 Bottom of ravine, 30 ft. below spur, course W.

Asc.

57.20 Top of ridge, 100 ft. above ravine, bears E. and W.

Desc.

72.50 Bottom of hollow, 90 ft. below spur, course W.

Asc.

73.80 Top of spur, 40 ft. above hollow, bears N.80°W. and S.80°E.

Desc.

79.83 Fall 18 lks.East of the cor.of Tps.32 and 33 S., Rs.7 and S.W., which is a conglomerate stone, 6x16x10 ins., above ground, firmly set, and mkd. and witnessed as described by the surveyor general; the bearing trees are poorly marked. I therefore destroy the old cor. and re-establish

Retracement East bdy. T.33 S., R.8 W.-Continued.

Chains

it in the same place as follows:

Set an iron post, 3 ft. long, 3 ins. in dia., 24 ins. in the ground, for cor. of Tps. 32 and 33 S., Rs. 7 and 8 W., mkd. on brass cap

T 32 S in N half.

T 33 S in S half.

R 8 W S 36 in NW.

R 7 W S 51 in NE.

R 7 W S 6 in SE.; and

R 8 W S 1 in SW quadrants; from which

A cedar, 9 ins. dia., bears N.65°E., 22 lks.

dist., mkd. T 32 S R 7 W S 51 B T.

A pinon pine, 6 ins. dia., bears S.50°E., 39 lks.

dist., mkd. T 33 S R 7 W S 6 B T.

A cedar, 8 ins. dia., bears S.64°W., 34 lks.

dist., mkd. T 33 S R 8 W S 1 B T.

A cedar, 8 ins. dia., bears N.57°W., 26 lks.

dist., mkd. T 32 S R 8 W S 36 B T.

The course of this line is therefore N.0°5'W., 79.28 chs.

Entire mile over rough broken ridges and hollows, draining

northwesterly. Soil, sandy loam 12 ins. deep, medium texture.

Sandstone boulders on S.62.00 chs. Hard clay subsoil.

Timber, cedar and pinon pine.

Some good grass.

Mountainous or heavily timbered land, 79.28 chs.

September 10, 1910: At this cor. I set off 5°04'N., on the decl. arc; and at 11 h 57 m a.m., l.m.t., I observe the sun on the meridian, the resulting lat. is 37°59'W., which is the proper lat. nearly.

Retracement N.bdy. T.33 S., R.8 W.

West, on retracement line bet. secs. 1 and 36.

Retracement N.bdy.T.33 S., R.8 W.-Continued.

- | Chains | Description |
|--------------|---|
| | Over mountainous land; through heavy timber. Dense sage. |
| | Desc. |
| 1.00 | Swale, 10 ft. below cor. course S.80°W.
Asc. gradually. Leave timber, bears NE and SW. |
| 56.20 | Top of spur, 60 ft. above swale, bears NE and SW.
Desc. |
| 38.10 | Swale, 40 ft., below spur, course N.
Enter valley, bears N. and S. |
| 40.20 | Fall 122 lks. N. of the $\frac{1}{4}$ sec.cor. bet. secs. 1 and 36, which is a charred post; witnessed as described by the surveyor general, I found only the remains of the post which is almost decayed. I destroy the old cor. and re-establish it in the same place as follows:
Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for $\frac{1}{4}$ sec.cor.. mkd. on brass cap $\frac{1}{4}$ S 36 in N half and S 1 in S half; dig pits, 18x18x12 ins., E. and W. of post 3 ft. dist.; and raise a mound of earth, $5\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high, N. of cor. |
| 84.33 | Fall 255 lks. N. of the cor. of secs. 1, 2, 35, and 36, heretofore described.
The course of this mile is therefore S.88°16'W., 84.37 chs. |
| E.38.10 chs. | Over rolling hills, sloping westerly. Soil sandy loam about 2 ft. deep, covered with cobble rock. |
| W.46.27 chs. | is in Parowan valley, nearly level, gentle slope to the west, no rocks. Soil, sandy and clay loam; 3 ft. deep, gravelly subsoil. No timber. Undergrowth, sage brush. |
| | Mountainous or heavily timbered land, or land covered with dense undergrowth, 84.37 chs. |

September 10, 1910.

Dunby Stewart
Instrumentman G.L.O.

E. bdy. T. 33 S., R. 8 W.

Survey commenced September 4, 1910, and executed with a W. and L.E. Gurley Explorer's transit, with solar attachment. The horizontal limb is provided with two double verniers placed opposite to each other, reading to single minutes of arc; which is also the least count of the ^{verniers of the} latitudes and declination arcs.

The instrument was examined, tested on the meridian at Salt Lake City, found correct, and was approved by the surveyor general for Utah, on August 6, 1910.

I examine the adjustments of the instrument and correct the level and collimation arcs; then, to test the solar apparatus by comparing its indications resulting from solar observations made during p.m., and a.m., hours with a meridian established by Polaris observation; I proceed as follows:

At the cor. of Tps. 33 and 34 S., R. 8 W., latitude $37^{\circ}53'51''$ N., longitude $112^{\circ}59'47''$ W., I set off $37^{\circ}54'N.$, on the lat. arc; $7^{\circ}16'N.$, on the decl. arc; and at 3 h 59 m p.m., l.m.t., I determine a meridian with the solar, and mark a point thereof on a stone firmly set in the ground, 5.00 chs. N. of the cor.

At 8 h 39.4 m p.m., l.m.t., I observe Polaris at eastern elongation, in accordance with the Manual, and mark the line thus determined by a tack driven in a wooden plug set in the ground, 5.00 chs. N. of the Cor.

September 4, 1910.

September 5, 1910: At 6 h 30 m a.m., l.m.t., I lay off the azimuth of Polaris $1^{\circ}29.4'$ to the west, and mark a point in the meridian thus determined by cutting a small groove in the stone already set 5.00 chs. N. of the cor.; this mark

East bdy.T.35 S.,R.8 W.-Continued.

Chains

falls 0.37 ins.east of the meridian determined with the solar.

At 6 h 59 m a.m.,l.m.t.,I set off $37^{\circ}54'N.$,on the lat. arc; $7^{\circ}03'N.$,on the decl.arc;and mark the meridian determined with the solar,by a cross on the stone,already set 5.00 chs.N.of the cor.;this mark falls 0.34 ins. East of the meridian established by Polaris observation. The solar apparatus by p.m. and a.m. observations defines positions for meridians respectively about $0'19''$ west and $0'18''$ east of the meridian established by Polaris observation;therefore I conclude that the adjustments of the instrument are satisfactory.

The magnetic bearing of the meridian,at 7 h 30 m a.m.,was N. $15^{\circ}50'W.$,the angle thus determined gives the mag .decl. $15^{\circ}50'E.$

From the cor.of Tps.35 and 54 S.,R.8 W.,heretofore described .

I run

North, on random line along E.bdy.of Tp.,setting temp.: sec.and sec.cors.at intervals of 40.00 chs. ; and fall at 405.57 chs 13.25 chs.West of the cor.of secs. 1,6,7, and 12 ,on E.bdy.of Tp.,heretofore described.

The falling being out of limits of $21'$ of arc:I abandon the random line,run south on true line from the cor. of secs.1,6,7, and 12,according to Special Instructions

September 6,1910.

East bdy.T.33, S., R.8 W.-Continued.

Chains

September 7, 1910. At 6 h, 58 m a.m., l.m.t., I Set off $37^{\circ} 58' N.$, on the lat.arc; $60^{\circ} 18' N.$, on the decl.arc; and determine a meridian with the solar, at the cor.of secs.1, 6, 7, and 12, on E.bdy.of Tp.,

Thence I run

South, on true line bet.secs.7 and 12.

Over mountainous land; through heavy timber and scattering Undergrowth.

Desc.

22.00 Bottom of hollow, 150 ft. below cor., course S. $80^{\circ} W.$

Asc.

25.70 Top of ridge, 200 ft. above hollow, bears N. $70^{\circ} E.$ and S. $70^{\circ} W.$

Desc.

44.60 Bottom of hollow, 50 ft. below ridge, course W.

Asc.

45.57 Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for $\frac{1}{4}$ sec.cor.. mkd.on brass cap $\frac{1}{4}$ S 12 in W half and S 7 in E half; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.

46.00 Top of ridge, 200 ft. above hollow, bears E. and W.

Desc.

85.57 Set an iron post, 3 ft. long, 3 ins. in dia., 24 ins. in the ground, for cor.of secs.7, 12, 13, and 18, mkd.on brass cap
T 33 S 1 in N half.

R 8 W S 12 in NW.

R 7 W S 7 in NE.

S 18 in SE.; and

S 13 in SW.quadrants; from which

A pinon pine, 11 in. in dia., bears N. $64^{\circ} E.$, 96 lks.
dist.. mkd.T 33 S R 7 W S 7 B T.

A pinon pine, 14 ins.dia., bears S. $61^{\circ} E.$, 50 lks.
dist.. mkd.T 33 S R 7 W S 18 B T.

A pinon pine, 12 ins.dia., bears S. $3^{\circ} W.$, 95 lks.

East bdy.T.33 S., R.8 W.-Continued.

Chains

dist..mka.T 33 S R 8 W S 13 B T.

A pinon pine, 16 ins. dia., bears N.5°W., 26 lks.

dist..mka.T 33 S R 8 W S 12 B T.

Entire mile over rough ridges and hollows, general slope northwest, Soil, sandy and clay loam medium texture, 6 to 10 ins. deep, mixed with considerable rock. Subsoil, clay. Timber, cedar and pinon pine. Undergrowth, sage brush, patches of oak and maple where soil is moist; patches of grass.

Mountainous or heavily timbered land, 85.57 chs.

September 7, 1910: At this cor. I set off 6°12'N., on the decl. arc; and at 11 h 58 m a.m., l.m.t., I observe the sun on the meridian, the resulting lat. is 37°57'N., which is the proper lat. nearly.

South, on a true line bet. secs. 13 and 18.

Over mountainous land; through heavy cedar and pinon pine timber.

Desc.

15.50 Bottom of canon, 200 ft. below sec.cor., course N.40°W.

Asc.

40.00 Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for $\frac{1}{2}$ sec.cor.. mka. on brass cap $\frac{1}{4}$ S 13 in W half and S 18 in E. half; from which

A pinon pine, 8 ins. dia., bears N.50°E., 53 lks.

dist..mka. $\frac{1}{4}$ S 18 B T.

A pinon pine, 12 ins. dia., bears S.45°W. 29 lks.

dist..mka. $\frac{1}{4}$ S 13 B T.

54.50 Top of ridge, 350 ft. above canon, bears NW and SE.

Desc.

59.00 Bottom of hollow, 200 ft. below ridge; course N.60°W.

Asc.

E.bdy.T.33 S.,R.8 W.-Continued.

Chains

- 80.00 Set an iron post, 3 ft. long, 3 ins. in dia., 24 ins. in the ground, for cor. of secs. 13, 18, 19, and 24, mkd. on brass cap
 T 33 S in N half.
 R 8 W S 13 in NW,
 R 7 W S 18 in NE.
 S 19 in SE.; and
 S 24 in SW. quadrants; from which
 A pinon pine, 6 ins. dia., bears N. 68° E., 68 lks.
 dist..mkd.T 33 S R 7 W S 18 B T.
 A pinon pine, 6 ins. dia., bears S. 67° E., 24 lks.
 dist..mkd.T 33 S R 7 W S 19 B T.
 A pinon pine, 6 ins. dia., bears S. 56° W., 41 lks.
 dist..mkd.T 33 S R 8 W S 24 B T.
 A cedar, 24 ins. dia., bears N. 20° W., 86 lks.
 dist..mkd.T 33 S R 8 W S 13 B T.

Entire mile over rough and broken ridge and hollows, with steep slopes, with general slope and drainage westerly. Soil, clay and sandy loam, from 8 to 16 ins. deep, in general the soil on north slopes is more moist and deeper than on south slopes and therefore grass and undergrowth are more abundant on north slopes. Heavy cedar and pinon pine timber. Undergrowth, scattering sage brush, oak and buck brush, the latter two mostly on north slopes. Some good grass.

Mountainous or heavily timbered land, 80.00 chs.

September 7, 1910.

September 8, 1910: At 6 h 58 m a.m., l.m.t., I set off 37° 57' N., on the lat.arc; 5° 56' W., on the decl.arc; and determine a meridian with the solar, at the cor. of secs. 13, 18, 19, and 24.

Thence I run

East bdy.T.33 S., R.8 W.-Continued.

Chains	South, on true line bet. secs. 19 and 24. Over mountainous land; through scattering timber and dense undergrowth.
	Asc.
9.50	Top of spur, 150 ft. above cor., bears NW and SE. Enter heavy timber, bears NW and SW.
	Desc.
25.55	Bottom of swale, 100 ft. below ridge, course N".
	Asc.
37.00	Top of spur, 300 ft. above hollow, bears N.20°E. and S.20°W.
	Desc.
40.00	Set an iron post, 3 ft. long, 1 in. in dia., 14 ins. in the ground, on solid rock, and surrounded by mound of earth, and stone, for cor. of sec. cor. mka. on brass cap N 24 in W. half and S 19 in E half; from which A pinon pine, 10 ins. dia., bears S.64°E., 55 lks. dist..mka. N 19 E T.
	A pinon pine, 7 ins. dia., bears S.42°W., 42 lks. dist..mka. S 24 E T.
46.50	Bottom of swale, 50 ft. below ridge, course E.
	Asc.
71.00	Top of ridge, 100 ft. above swale, bears N.60°W. and E.
	Desc.
80.00	Set an iron post, 3 ft. long, 5 ins. in dia., 18 ins. in the ground, on bed rock, and surrounded with mound of earth and stone, for cor. of secs. 1924, 25, and 50, mka. on brass cap T 33 S in N half. R 8 W S 24 in NW. R 7 W S 19 in NE. S 30 in SE.; and S 25 in SW. quadrants; from which A pinon pine, 16 ins. dia., bears N.52°E., 37 lks. dist..mka. T 33 S R 7 W S 19 E T. A pinon pine, 22 ins. dia., bears S.88°E., 10 lks.

East bdy.T.33 S., R.8 W.-Continued.

Chains	<p>dist..mka.T 33 S R 7 W S 30 B T. A pinon pine, 24 ins.dia., bears S.42°W., 94 lks. dist..mka.T 33 S R 8 W S 25 B T. A pinon pine, 36 ins.dia., bears N.37°W., 36 lks. dist..mka.T 33 S R 8 W S 24 B T.</p> <p>Entire mile over high steep ridges and hollows, not much rock; strong local attraction for the needle on south part of mile. Considerable prospecting for iron has been done in this neighborhood. Soil, clay and loam, a decomposition from volcanic overflow. Timber, cedar and pinon pine. Undergrowth, oak, sage, and buck brush.</p> <p>Mountainous heavily timbered land, or land covered with dense undergrowth, 80.00 chs.</p>
	<p>South, on true line bet:secs.25 and 30.</p> <p>Over mountainous land; through heavy cedar and pinon pine timber and dense oak, buck and mahogany brush.</p> <p>Desc.steep south slope of mountain.</p>
40.00	<p>Point 800 ft.below sec.cor.,</p> <p>Set an iron post, 3 ft.long, 1 in.in dia., 20 ins.in the ground, on bed rock, and surrounded by mound of stone, for $\frac{1}{4}$ sec.cor..mka.on brass cap $\frac{1}{4}$ S 25 in W half and S 30' in E half;from which</p> <p>A pinon pine, 12 ins.dia., bears S.56°E., 66 lks. dist..mka.$\frac{1}{4}$ S 30 B T.</p> <p>A pinon pine, 24 ins.dia., bears N.31°W., 29 lks. dist..mka.$\frac{1}{4}$ S 25 B T.</p>
42.00	<p>Foot of descent, bears N.80°W.and S.80°E.</p> <p>Leave timber and enter dense oak and maple undergrowth, bears N.80°W.and S.80°E.</p> <p>Enter bottom of Little Creek Canon,</p>
46.50	Road from Parowan to Panguitch, bears N.80°W.and S.80°E.
48.50	Little Creek, 10 lks.wide, 5 ins.deep, clay bottom, moderate

East bdy.T.33 S., R.8 W.-Continued.

Chains	current, course N.80°W.
55.00	Leave canon bottom, bears N.80°W. and S.80°E.
	Leave dense and enter scattering undergrowth, bears N.80°W. and S.80°E.
80.00	Set an iron post, 3 ft. long, 3 ins. in dia., 24 ins. in the ground, for cor. of secs. 25, 30, 31, and 36, mkd.on brass cap T 33 S in N half. R 8 W S 25 in NW. R 7 W S 30 in NE. S 31 in SE.; and S 36 in SW. quadrants; from which A pinon pine, 10 ins. dia., bears N.17°E., 43 lks. dist..mkd.T 33 S R 7 W S 30 B T. A pinon pine, 11 ins. dia., bears S.76°E., 35 lks. dist..mkd.T 33 S R 7 W S 31 B T. A pinon pine, 22 ins. dia., bears S.51°W., 59 lks. dist..mkd.T 33 S R 8 W S 36 B T. A pinon pine, 8 ins. dia., bears N.45°W., 18 lks. dist..mkd.T 33 S R 8 W S 25 B T. N.42.00 chs. is on South slope of high ridge, steep and rocky, volcanic rock with stringers of iron ore all through it. Soil rich loam about 6 ins. deep on clay and rock subsoil. Timber, cedar and pinon pine. S.38.00 chs. is mostly a north slope more gradual. Soil clay loam, rich, from 8 to 16 ins. deep, subsoil clay and gravel. Timber cedar and pinon pine. Undergrowth, oak, maple, sage, and buck brush. Good grass. Mountainous or heavily timbered land, or land covered with dense undergrowth, 80.00 chs.
	September 8, 1910: At this cor. I set off 5°50' N., on the decl. arc; and at 11 h 58'm., a.m., P.m.t., I observe the sun on the meridian, the resulting lat. is 37°55' N., which is the proper lat. nearly.

East bdy.T.33 S.,R.8 W.-Continued..

Chains	
	South, on a true line bet. secs. 31 and 36.
	Over mountainous land; through heavy timber and scattering undergrowth.
	Asc.
14.25	Top of ridge, 150 ft. above sec. cor., bears E. and W.
	Desc.
35.50	Bottom of hollow, 250 ft. below ridge, course W.
	Enter dense undergrowth, bears E. and W.
	Asc.
40.00	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., mkd. on brass cap $\frac{1}{4}$ S 36 in W half and S 31 in E half; from which
	A pinon pine, 8 ins. dia., bears S. 20° E., 15 lks. dist.. mkd. $\frac{1}{4}$ S 31 B T.
	A pinon pine, 7 ins. dia., bears S. 80° W., 58 lks. dist.. mkd. $\frac{1}{4}$ S 36 B T.
59.00	Top of ridge, 400 ft. above hollow, bears N. 60° W. and S. 60° E.
	Desc.
80.00	Intersect S. bdy. Tp. 13.25 chs. S. 89° 57' E. of the closing cor. of Tps. 33 and 34 S., R. 7 W., which is a sandstone, 10x14x8 ins., above ground, firmly set, and mkd. and witnessed as described by the surveyor general.
	Set an iron post, 3 ft. long, 3 ins. in dia., 20 ins. in the ground, on bed rock, and surrounded by mound of earth and stone, for closing cor. of Tps. 33 S., R. 7 and 8 W., mkd. on brass cap
	CCT 33 S in W half.
	T 34 S R 7 W R 8 W S 6 S 1 in S half.
	S 31 in NE.; and
	S 36 in NW. quadrants; from which
	A pinon pine, 10 ins. dia., bears N. 44° E., 15 lks. dist.. mkd. T 33 S R 7 W S 31 B T.

E.bdy.T.33 S.,R.8 W.-Continued.

Chains

A pinon pine, 6 ins. dia., bears N.60°W., 19 lks.

dist..mkd.T. 33 S R 8 W S 36 B T.

Note:I destroy all marks on the cor.of Tps.33 and 34 S.,R.8 W.,which pertain to Tp.33 S.,R.8 W.;and I destroy all marks on the closing cor.of Tps.33 and 34 S.,R.7 W., which pertain to Tp.33 S.,R.7 W.

Entire mile is over high mountains land,drainage to the west,S.slopes are steep and north slopes are gradual.: Soil,clay loam,rich and damp on north slopes dry on S. slopes,considerable rock mixed with soil.Timber,cedar and pinon pine.Undergrowth,oak,mahogany, and buck brush .

Good grass for grazing .

Mountainous or heavily timbered land,or land covered with dense undergrowth,80.00 chs.

September 8,1910.

John P. Stewart

Instrumentman,G.L.O.

Boundaries of T.33 S., R.8 W.

Boundaries of T.33 S., R.8 W.

Latitudes, departures, and closing errors.

Line designated	Course Distance chxs.	Latitudes.		Departures.	
		N. chxs.	S. chxs.	E. chxs.	W. chxs.
W.bdy.sec.54					
T.33 S., R.8 W.	N.0°25' E.	59.69.	59.69.	.17.	...
W.bdy.sec.54					
T.33 S., R.8 W.	N.0°14' W.	40.73	40.73		.17
W.bdy.sec.27					
T.33 S., R.8 W.	N.0°09' W.	40.28	40.28		.11
W.bdy.sec.27					
T.33 S., R.8 W.	N.0°05' W.	40.56	40.56		.06
W.bdy.sec.27					
T.33 S., R.8 W.	S.89°55' E.	79.60		.12	79.60
W.bdy.sec.23					
T.33 S., R.8 W.	N.0°40' E.	40.11	40.11	.47	
W.bdy.sec.23					
T.33 S., R.8 W.	N.2°10' E.	40.22	40.19		1.52
W.bdy.sec.14					
T.33 S., R.8 W.	N.0°16' E.	81.60	81.60		.57
W.bdy.sec.14					
T.33 S., R.8 W.	S.89°25' E.	78.40		.19	78.40
W.bdy.sec.12					
T.33 S., R.8 W.	N.0°35' E.	79.18	79.18		.81
W.bdy.sec.1					
T.33 S., R.8 W.	N.1°35' W.	79.18	79.15		2.19
W.bdy.T.33 S.R.8 W.N.88°16' E.	84.37	2.55		84.35	
E.bdy.T.33 S.R.8 W.S.0°05' E.	79.28		79.28	.12	
E.bdy.T.33 S.R.8 W.South	405.57		405.57		
S.bdy.T.33 S.R.8 W.N.89°57' W.	13.25	.01			13.25
W.bdy.T.33 S.R.8 W.North	3.95	3.95			
S.bdy.T.33 S.R.8 W.S.89°34' W.	74.52		.78		74.52
S.bdy.T.33 S.R.8 W.W.88°41' W.	38.46	.88			38.45
S.bdy.T.33 S.R.8 W.N.89°15' W.	35.00	.46			35.00
S.bdy.T.33 S.R.8 W.S.85°49' W.	41.51		3.03		41.40
S.bdy.T.33 S.R.8 W.N.89°54' W.	40.10	.07	.07		40.10
Convergency				.19	
Totals		489.41	488.97	848.98	245.25
		488.27		245.25	
Error in lat.			.44		
Error in dep.				.73	

Boundaries of T.53 S., R.8 W.-Concluded.

General Description.

For General description see notes of Subdivision of
T.53 S., R.8 W.

Dunphy Stewart
John R Stewart

Instrumentmen G.L.O.

Volume

#

R0384

FINAL OATHS OF DEPUTY SURVEYOR AND HIS ASSISTANTS.

LIST OF NAMES.

A list of the names of the individuals employed by _____, United States Deputy Surveyor, to assist in running, measuring, and marking the lines and corners described in the foregoing field notes of the survey of _____ showing the respective capacities in which they acted:

_____, *Chainman.*
 For list of names and final oath of assistants see book, *Chainman.*
 "I" T. 32 S., R. 6 W. _____, *Moundman.*
 _____, *Moundman.*
 _____, *Axman.*
 _____, *Axman.*
 _____, *Flagman.*

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted _____, United States Deputy Surveyor, in surveying all those parts or portions of the _____

of the _____
 meridian, _____ of _____, which are represented
 in the foregoing field notes as having been surveyed by him and under his direction; and that said survey
 has been in all respects, to the best of our knowledge and belief, well and faithfully surveyed, and the
 corner monuments established, according to the instructions furnished by the United States Surveyor
 General for _____

_____, *Chainman.*
 _____, *Chainman.*
 _____, *Moundman.*
 _____, *Moundman.*
 _____, *Axman.*
 _____, *Axman.*
 _____, *Flagman.*

Subscribed and sworn to before me this _____
 day of _____, 190 _____ }



FINAL OATH OF UNITED STATES DEPUTY SURVEYOR.

I, _____, United States Deputy Surveyor, solemnly swear that, in pursuance of a contract received from _____, United States Surveyor General for _____, bearing date of _____, day of _____, 190_____, I have well, faithfully, and truly, in my own proper person, and in strict conformity with the instructions furnished by the United States Surveyor General for _____, the Manual of Surveying Instructions, and the laws of the United States, surveyed all those parts or portions of _____.

For final oaths of transitman see books "I" T. 32 S.R. 6 W.
and "Z" 1^{1/2} T. 31 S.R. 9 W.

of the _____ meridian, in the _____, which are represented in the foregoing field notes as having been surveyed by me, and under my direction; and I do further solemnly swear that all the corners of said survey have been established and perpetuated in strict accordance with the Manual of Surveying Instructions, and the special written instructions of the United States Surveyor General for _____, and in the specific manner described in the field notes, and that the foregoing are the original field notes of such survey.

United States Deputy Surveyor

Signed and sworn to before me }
this _____ day of _____, 190_____. }

ccccc
O SEAL O
cccccc

APPROVAL.

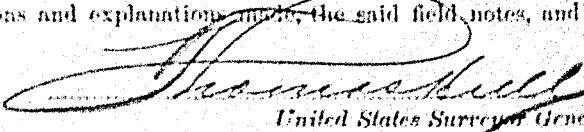
OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Salt Lake City, Utah, January 7, 1914.

The foregoing field notes of the survey of the East, and retracement of the fractional south, east, and north boundaries of Township No. 33 South, Range No. 8 West of the Salt Lake Base and Meridian, Utah,

executed by John P. Stewart and Quincy Stewart,

under _____, dated August 6, 1910, _____, having been carefully examined, and the necessary corrections and explanations made, the said field notes, and the surveys they describe, are hereby approved.


United States Surveyor General

I certify that the foregoing transcript of the field notes of the above-described surveys in _____, has been correctly copied from the original notes on file in this office.

United States Surveyor General

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4-670

D
BOOK A-384

FIELD NOTES

2.3.B
OF THE SURVEY OF THE

S U R V E Y I S T O N

AND

RETRACEMENT AND RESURVEY OF SUBDIVISION

OF

TOWNSHIP NO. 36 SOUTH, RANGE NO. 8 WEST

Of the SALT LAKE PLAT AND Meridian,

in the State of U. S. A.

N. T. L. E.

EXECUTED BY

JOHN P. STEWART AND CHINCY STEWART

Transitmen

in the capacity of U. S. Surveyor, under instructions dated Aug. 6, 1910,

issued by the United States Surveyor General to govern surveys included in

Group No. 1, which were approved by the Commissioner of the General Land

Office, Aug. 25, 1910, pursuant to authority contained in the Act of

Congress dated ..., 1910.

Survey commenced September 2, 1910.

Survey completed September 15, 1910.

Pet. 12, 14, 15

Aug. 16, 1910

6-63-2-2-2

Sept. 15, 1910

Frank S. Allen, Chainman.
 R. Bert Carter, Chainman.
 Ruban W. Riley, Moundman.
 Isaac R. Hayes, Axman.
 William Carter, Flagman.
 Maeser Dalley, Flagman.

Verne O. Nelson, Chainman.
 Alton Ivie, Chainman.
 Harvey W. Elliott, Moundman.
 Nicholas L. Sheffield, Axman.
 Milo Nelson, Flagman.

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30	29	28	27	26	25
31	32	33	34	35	36

Book D
Rex Lube. 154A

~~30-69~~

~~30-69~~

0

39 69 ✓
40 73 ✓
39 96 ✓
40 28 ✓
40 56 ✓
79 60 ✓
40 11 ✓
40 22 ✓

) 36115

0

Rex Lube

78 84 ✓
81 66 ✓
79 18 ✓
82 23 ✓
82 23 ✓
79 18 ✓

483 32

0

Subdivisions

80 00 ✓
84 02 ✓
77 01 ✓
81 82 ✓
39 65 ✓
80 60 ✓
77 39 ✓
81 00 ✓
80 00 ✓
83 20 ✓
83 27 ✓
83 10 ✓

931 06

0

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Meanders Page.....

PRELIMINARY OATHS OF ASSISTANTS.

We, Frank S. Allen

and R. Bert Carter

do solemnly swear that we will well and faithfully execute the duties of chainmen; that we will level the chain upon even and uneven ground, and plumb the tally pins, either by sticking or dropping the same; that we will report the true distances to all notable objects, and the true lengths of all lines that we assist in surveying, to the best of our skill and ability, and in accordance with instructions given us, in the survey of Subdivision and Ret. and res. Subdivision T.33 S., R.8 W., Sub. and Retracement Sub. T.33 S., R.7 W.; Sub. and Retracement Sub. T.32 S., R.6 W. S.L.B. & M., Utah.

Frank S. Allen

Chairman

R. Bert Carter

Chairman

Subscribed and sworn to before me this 2nd

day of September 1910, xx

S. R. Stewart
SEAL

John R. Stewart

Instrumentman G.L.O.

xxx, I, Ruban W. Riley

xxx

do solemnly swear that I will well and truly perform the duties of moundmn in the establishment of corners, according to the instructions given ~~me~~ to the best of ~~my~~ skill and ability, in the survey of Sub. and Ret. and res. Sub. T.33 S., R.8 W.; Sub. and Retracement Sub. T.33 S., R.7 W.; Sub. and Retracement Sub. T.32 S., R.7 W.; Sub. and Retracement Sub. T.32 S., R.6 W. S.L.B. & M., Utah.

Ruban W. Riley

Moundmn

Subscribed and sworn to before me this 2nd

day of September 1910, xx

S. R. Stewart
SEAL

John R. Stewart

Instrumentman G.L.O.

xxx, I, Isaac R. Hayes

xxx

do solemnly swear that I will well and truly perform the duties of axmow in the establishment of corners and other duties, according to instructions given ~~me~~, to the best of ~~my~~ skill and ability, in the survey of Sub. and Ret. and res. Sub. T.33 S., R.8 W.; Sub. and Retracement Sub. T.33 S., R.7 W.; Sub. and Retracement Sub. T.32 S., R.7 W.; Sub. and Retracement Sub. T.32 S., R.6 W. S.L.B. & M., Utah.

Isaac R. Hayes

Axmow

Subscribed and sworn to before me this 2nd

day of September 1910, xx

S. R. Stewart
SEAL

John R. Stewart

Instrumentman G.L.O.

I, William Carter

do solemnly swear that I will well and truly perform the duties of flagman according to instructions given me, to the best of my skill and ability, in the survey of Sub. and Retracement Sub. T.32 and T.33 S., R.7 W. and T.32 S., R.6 W. S.L.B. & M., Utah.

William Carter

Flagman

Subscribed and sworn to before me this 20th

day of September 1910, xx

S. R. Stewart
SEAL

John R. Stewart

Instrumentman G.L.O.

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Meanders Page _____

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PRELIMINARY OATHS OF ASSISTANTS.

WE, _____ and _____

do solemnly swear that we will well and faithfully execute the duties of chainmen; that we will level the chain upon even and uneven ground, and plumb the tally pins, either by sticking or dropping the same; that we will report the true distances to all notable objects, and the true lengths of all lines that we assist in measuring, to the best of our skill and ability, and in accordance with instructions given us, in the survey of

_____, Chainman.

_____, Chainman.

Subscribed and sworn to before me this _____
day of _____, 19_____ }



WE, _____ and _____

do solemnly swear that we will well and truly perform the duties of moundmen in the establishment of corners, according to the instructions given us, to the best of our skill and ability, in the survey of

_____, Moundman.

_____, Moundman.

Subscribed and sworn to before me this _____
day of _____, 19_____ }



WE, _____ and _____

do solemnly swear that we will well and truly perform the duties of axmen in the establishment of corners and other duties, according to instructions given us, to the best of our skill and ability, in the survey of

Flagman, D. C. D.

_____, Axman.

_____, Axman.

Subscribed and sworn to before me this _____
day of _____, 19_____ }



I, _____ Maeser Dalley, do solemnly swear that I will well and truly perform the duties of flagman according to instructions given me, to the best of my skill and ability, in the survey of the subdivisional lines of T. 33 S., R. 3 W.S.L.B. & M., Utah

Maeser Dalley, Flagman.

Subscribed and sworn to before me this 2d
day of September, 1910, }

John R. Stewart
U.S. Transitman

BOOK A-384

INDEX DIAGRAM.

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Meanders Page _____

PRELIMINARY OATHS OF ASSISTANTS.

WE, Verne O. Nelson and Alton Ivie
 do solemnly swear that we will well and faithfully execute the duties of chainmen; that we will level the chain upon even and uneven ground, and plumb the tally pins, either by sticking or dropping the same; that we will report the true distances to all notable objects, and the true lengths of all lines that we assist in measuring, to the best of our skill and ability, and in accordance with instructions given us, in the survey of Sub. and Retr. and Res. Sub. T.33 S., R.8 W.; Sub. T.33 S., R.7 W.; Sub. and Retracement Sub. T.32 S., R.6 W. S.L.B. & M., Utah.

Verne O. Nelson, Chairman
Alton Ivie, Chairman

Subscribed and sworn to before me this 2nd
 day of September 1910. *xxxx*

Gumby Stewart
 Instrumentman G.L.O.



xxxx, I, Harvey W. Elliott *xxxx*
 do solemnly swear that we will well and truly perform the duties of moundman in the establishment of corners, according to the instructions given *me* to the best of *my* skill and ability, in the survey of Sub. and Retr. and res. Sub. T.33 S., R.8 W.; Sub. T.33 S., R.7 W.; Sub. and Retracement Sub. T.32 S., R.6 W. S.L.B. & M., Utah.

Harvey W. Elliott, Moundman

Subscribed and sworn to before me this 2nd
 day of September 1910. *xxxx*

Gumby Stewart
 Instrumentman G.L.O.



xxxx, Nicholas L. Sheffield *xxxxx*
 do solemnly swear that *xx* will well and truly perform the duties of axmen in the establishment of corners and other duties, according to instructions given *me* to the best of *xxx* skill and ability, in the survey of Sub. and Retr. and res. Sub. T.33 S., R.8 W.; Sub. T.33 S., R.7 W.; Sub. and Retracement Sub. T.32 S., R.6 W. S.L.B. & M., Utah.

Nicholas L. Sheffield, Axman

Subscribed and sworn to before me this 2nd
 day of September 1910. *xxxx*

Gumby Stewart
 Instrumentman G.L.O.

I, Milo Nelson, do solemnly swear that I will well and truly perform the duties of flagman according to instructions given *me*, to the best of my skill and ability, in the survey of Sub. and Retracement Sub. T.33 S., R.8 W.; Sub. T.33 S., R.7 W.; Sub. and Retracement Sub. T.32 S., R.6 W. S.L.B. & M., Utah.

Milo Nelson, Flagman

Subscribed and sworn to before me this 27th
 day of September 1910. *xxxx*

Gumby Stewart
 Instrumentman G.L.O.



Retracement Subdivision of T.33 S., R.8 W.

Survey commenced September 2, 1910: And executed with a Gurley Explorer's transit No. 957, with solar attachment. The horizontal limb is provided with two double verniers placed opposite to each other, reading to single minutes of arc; which is also the least count of the latitude and declination arcs;

The instrument was examined, tested on the meridian, at Salt Lake City, found correct, and was approved by the surveyor general for Utah, on August 6, 1910.

At the cor. of secs. 33, and 34, on S. bdy. of Tp., latitude $37^{\circ}53'51''N.$, longitude $112^{\circ}45'08''W.$, At 8 h 47 m p.m., l.m.t., I observe Polaris at eastern elongation, in accordance with the Manual, and mark a point thereof on a wooden plug set in the ground, 5.00 chs. N. of the cor.

September 2, 1910.

September 3, 1910: At 6 h 30 m a.m., l.m.t., I lay off the azimuth of Polaris $1^{\circ}29.4'$ to the west, and mark the meridian thus determined on a stone set firmly in the ground, 5.00 chs. N. of the cor.

At 7 h 0 m a.m., l.m.t., I set off $37^{\circ}54'N.$, on the lat. arc; $7^{\circ}47'N.$, on the decl. arc; and mark the meridian determined by the solar, by a cross on the stone already set 5.00 chs. N. of the cor.; this mark falls 0.3 ins. east of the meridian established by Polaris observation; therefore I conclude that the adjustments of the instrument are satisfactory.

Note: For complete test of instrument see notes of Retracement Subdivision T.34 S., R.8 W.

From the cor. of secs. 33, and 34, heretofore described.

I run

Retracement Subdivision T.33 S., R.8 W.-Continued.

Chains

- North, on retrace ment line bet. secs. 33 and 34 .
- Over mountainous land; through scattering timber and dense sage brush.
- Desc.
- 15.50 Foot of steep descent, 150 ft. below sec.cor., bears NE and SW.
- Enter Parowan Valley.
- Desc. gradually.
- 39.69 Fall 17 lks.W. of $\frac{1}{4}$ sec.cor.bet.secs.33 and 34, which is a red sandstone, 6x14x5 ins., above ground, firmly set, and witnessed as described by the surveyor general, the marks on bearing trees are almost invisible; therefore I destroy the old cor. and re-establish it in the same place as follows:
- Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for $\frac{1}{4}$ sec.cor., mkd.on brass cap $\frac{1}{4}$ S 33 in W half and S 34 in E half; from which
- A pinon pine, 6 ins. dia., bears N.84°29'E., 150 lks. dist..mkd. $\frac{1}{4}$ S 34 B T.
- A pinon pine, 6 ins. dia., bears N57°14'W., 106 lks. dist..mkd. $\frac{1}{4}$ S 33 B T.
- 67.50 Leave timber, bears N.60°E. and S.60°W.
- Enter dense undergrowth, bears N.60°E. and S.60°W.
- Foot of descent, bears N.60°E. and S.60°W.
- Enter level land.
- 80.42 Fall 1 lk .West of the cor.of secs. 27, 28, 33, and 34, which is a white sandstone, 5x10x6 ins., above ground, mkd. and witnessed as described by the surveyor general, the stone is fairly well set but the marks are poor; therefore I destroy the old cor. and re-establish it at the same point as follows:
- Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground, for cor.of secs. 27, 28, 33, and 34, mkd.on brass cap T 33 S S 28 in NW.

Retracement Subdivision of T.38 S., R.8 W.-Continued.

Chains	<p>R 8 W S 27 in NE.</p> <p>S 34 in SE.; and</p> <p>S 53 in SW quadrants; dig pits, 18x18x12 ins. in each sec.; 5½ ft. dist.; and raise a mound of earth, 4 ft. base, 2 ft. high, W. of cor.</p> <p>The course of the south half of this line is therefore N.0°15'E., 39.69 chs. the north half is N.0°14'W., 40.63 chs.</p> <p>S.15.50 chs. is on northwest slope of mountain, steep and rocky. Soil, red clay and sand about 4 fns. deep, timber cedar and pinon pine. Undergrowth, sage brush.</p> <p>N.65.26 chs. is in Parowan Valley, with gentle slope to the west. Soils sandy loam about 3 ft. deep, subsoil clay. Mountainous land or land covered with dense undergrowth, 80.42 chs.</p> <p>September 3, 1910: At this cor. I set off 7'41" N., on the decl. arc; and at 11 h 59'5 m.m., l.m.t., I observe the sun on the meridian, the resulting lat. is 37°55'N., which is the proper lat. nearly.</p> <p>East, on a retracement line bet. secs. 27 and 34.</p> <p>Over nearly level valley; through dense sage brush.</p> <p>Asc. gently.</p> <p>Leave valley, bears N. and S.</p> <p>Asc. abruptly..</p> <p>Enter heavy cedar and pinon pine timber, bears N. and S.</p> <p>Fall 5 lbs. S. of the ¼ sec. cor. bet. secs. 27 and 34, which is a limestone, 10x12x8 ins., above ground, firmly set, but poorly md. and the witness tree is almost grown over the mark; therefore I destroy the old cor. and re-establish it in the same place as follows:</p> <p>Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the</p>
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Retracement Subdivision of T.33 S., R.8 W.-Continued.

Chains	<p>ground, for $\frac{1}{4}$ sec.cor., mkd.on brass cap $\frac{1}{4}$ S 27 in N half and S 34 in S half; from which</p> <p>A pinon pine, 10 ins.dia., bears N.25°E., 33 lks. dist..mkd.$\frac{1}{4}$ S 27 B.T.</p> <p>A pinon pine, 8 ins.dia., bears S.80°W., 39 lks. dist..mkd.$\frac{1}{4}$ S 34 B.T.</p> <p>The course of this line is therefore N.89°56'E., 39.96 chs.</p> <p>W.16.00 chs.in nearly level valley gradual slope to the west, soil rich sandy loam 3 ft.deep, on subsoil clay No timber.Undergrowth, sage brush dense. Good grass.</p> <p>E.24.00 chs.W.slope of mountain steep and rocky conglomerate and sandstone, covered with cedar and pinon pine timber.Soilrich black loam, about 8 ins.deep, on conglomerate rock subsoil.Good grass.</p> <p>Moutainous or heavily timbered land, or land covered with dense undergrowth, 39.96 chs.</p> <p>North, on retracement line bet.secs.27 and 28.</p> <p>Over level valley; through dense sage brush.</p> <p>.20 Road from Paragonah to Paiguitch and to Beaver, bears W. and East 20 lks.thence North.</p> <p>.50 Corner of fence, bears W.and N.</p> <p>8.50 J.C.Borton's barn and corral bears W.2.00 chs.dist.</p> <p>10.00 J.C.Borton's house bears W.120 lks.dist.</p> <p>11.25 Irrigation ditch, 3 lks.Wide, 6 ins.deep, course S.20°W.</p> <p>39.00 Irrigation ditch, 4 lks.wide, 12 ins.deep, course S.25°W.</p> <p>40.28 Fall 10 lks.E.of old $\frac{1}{4}$ sec.cor.bet.secs.27 and 28, which is a sandstone, 10x10x5 ins., above ground, poorly set, and mkd.and witnessed as described by the surveyor general. I destroy the old cor.and re-establish it at the same place as follows:</p>
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Retracement Subdivision of T.35 S., R.8 E.-Continued

Chaining

Set an iron post, 5 ft. long, 1 in. in dia., 26 ins. in the ground, for $\frac{1}{2}$ sec. corl. mkd. on brass cap; S 26 in W half and S 27 in E half; dig pits, 10x18x12 ins. N. and S. of post, 3 ft. dist.; and raise a mound of earth, 3½ ft. base, 1½ ft. high, N. of cor.

68.50 Post, 70 lbs. wide, 2 ft. deep, course T.

80.84 Fall 16 lbs. E. of the cor. of secs. 21, 22, 27, and 28, which a sandstone, 5x8x8 ins., above ground, firmly set, and find and witnessed as described by the surveyor general.

I destroy the old cor. and re-establish it in the same place as follows:

Set an iron post, 5 ft. long, 2 ins. in dia., 24 ins. in the ground, for cor. of secs. 21, 22, 27, and 28, mkd. on brass cap

T 33 S S 21 in NW.

R 8 W S 22 in NE.

S 27 in SE.; and

S 28 in SW. quadrants; dig pits, 18x18x12 ins. in each sec. 5½ ft. dist.; and raise a mound of earth, 4 ft. base, 2 ft. high, W. of cor.

The course of the S. half of this mile is therefore N.

$0^{\circ}9'W.$ 40.28 ehs. the N. half N. $0^{\circ}5'W.$, 40.56 ehs.

The entire mile is in Parowan valley nearly level soil clay and sandy loam, rich and about 3 ft. deep, subsoil clay. Dense sage brush. Good grass.

Land covered with dense undergrowth, 80.84 ehs.

September 3, 1910.

John R. Stewart

Instrumentman G.L.O.

Retracement Subdivision of T.35 S., R.8 W. Continued.

Survey commenced September 4, 1910, and executed with a Young and Sons light mountain transit, No. 7382, with solar attachment. The horizontal limb is provided with two double verniers placed opposite to each other, reading to single minutes of arc; which is also the least count of the latitude and declination arcs.

The instrument was examined, tested on the meridian at Salt Lake City, found correct, and was approved by the surveyor general for Utah, on August 6, 1910.

I examine the adjustments of the instrument and correct the level and collimation errors; then, to test the solar apparatus by comparing its indications resulting from solar observations made in p.m. and a.m. hours, with a meridian established by Polaris observation, I proceed as follows:

At the cor. of secs. 21, 22, 27, and 28, heretofore described, latitude $37^{\circ}55'35''$ N., longitude $112^{\circ}43'08''$ W., I set off $37^{\circ}56'$ N., on the lat. arc; $7^{\circ}16'$ N., on the decl. arc; and at 3 h 59 m p.m., l.m.t., I determine a meridian with the solar, and mark a point thereof on a stone firmly set in the ground, 5.00 chs. N. of the cor.

At 8 h 37.8 m p.m. l.m.t., I observe Polaris at eastern elongation, in accordance with the Manual, and mark a point thereof on a wooden plug set in the ground, 5.00 chs. N. of the cor.

September 4, 1910.

September 5, 1910: At 6 h 40 m a.m., l.m.t., I lay off the azimuth of Polaris $1^{\circ}29.4$ m to the west, and mark a point in the meridian thus determined by cutting a small groove in the stone already set 5.00 chs. N. of the cor.; this mark falls 0.26 ins. east of the meridian established by the

Retracement Subdivision of T.33 S., R.8 W.-Continued.

Chains

solar.

At 6 h⁵⁹' m.a.m., l.m.t., I set off $37^{\circ}56'N.$, on the lat.arc. $7^{\circ}03'N.$, on the decl.arc; and mark the meridian determined with the solar, by a cross on the stone already set 5.00 chs.N. of the cor.; this mark falls 0.38 ins.east of the meridian established by Polaris observation.

The solar apparatus by p.m. and a.m. observations defines positions for meridians respectively about $0'14''$ west and $0'20''$ east of the meridian established by Polaris observation; therefore I conclude that the adjustments of the instrument are satisfactory.

The magnetic bearing of the meridian at 7 h 50 m.am. is N. $15^{\circ}50'W.$, the angle thus determine gives the mag. decl. $15^{\circ}50'E.$

From the cor.of secs. 21, 22, 27, and 28, heretofore described.

I run

East, on a retracement line bet. secs. 22 and 27.

Over nearly level valley; through dense undergrowth.

Asc.gently.

.20 Creek, 4 lks.wide, 3 ins.deep, in wash, 6 lks.wide, 8 ft.deep, from Little Creek Canon, course N.20 lks.thence West.

.50 Road from Paragonah to Beaver, bears N.and S.

.70 Fence, bears N.and S.

Enter cultivated field.

12.00 Irrigation ditch, 4 lks.wide, 2 ft.deep, course N. $50^{\circ}W.$ (dry)
Leave cultivated land, bears N. $50^{\circ}W.$ and S. $50^{\circ}E.$

32.00 Leave valley, bears N.and S.

Asc.abruptly.

55.50 Enter heavy cedar and pinon pine timber, bears N.and S.

57.00 Ravine, 30 ft.deep, course N. $40^{\circ}W.$

Asc.

Retracement Subdivision of T.38 S..R.8 W.-Continued.

Chains

- 40.00 Fall 6 lks.N.of the $\frac{1}{2}$ sec.cor.,betsecs.22 and 27,which
is a pinon pine,10 ins.in dia.,mkd.and witnessed as de-
scribed by the surveyor general.The marks are almost
overgrown;therefore I destroy the old cor.,and re-estab-
lish it in the same place as follows:
Set an iron post,3 ft.long,1 in.in dia.,26 ins.in the
ground,for $\frac{1}{2}$ sec.cor.:mkd.on brass cap $\frac{1}{4}$ S 22 in N half
and $\frac{1}{4}$ S 27 in S half;from which
A pinon pine,8 ins.dia.,bears N.45°W.,33 lks.
dist..mkd. $\frac{1}{4}$ S 22 B.T.
A pinon pine,9 ins.dia.,bears S.24°E.,33 lks.
dist..mkd. $\frac{1}{4}$ S 27 B.T.
- 68:50 Top of ridge,650 ft.above ravine,bears N.and S.
Desc.
- 71.00 Bottom of swale,20 ft.below ridge,course S.
Asc.
- 79.25 Top of ridge,60 ft.above swale,bears N.20°E.and S.20°
W.
Desc.
- 79.60 Fall 12 lks.N.of the cor.of secs.22,23,26, and 27,which
is a stationary red sandstone,4x3x2 ft.above ground,
mkd.and witnessed as described by the surveyor general,
the cor.stone is disintegrating therefore I destroy the
marks on the same and re-establish it in the same place
as follows:
Set an iron post,3 ft.long,2 ins.dia.,24 ins.in the
ground,for cor.of secs.22,23,26, and 27,mkd.on brass cap
T 38 S S 22 in NW.
R 8 W S 23 in NE.
S 26 in SE.;and
S 27 in SW.quadrants;from which
A pinon pine,6 ins.dia.,bears N.56°W.,43 lks.
dist..mkd.T 38 S R 8 W S 23 B.T.
A pinon pine,7 ins.dia.,bears S.6°28'E.,68 lks.

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Retracement Subdivision T.33 S., R.8 W.-Continued.

Chains

dist..mkd.T 33 S R 8 W S 26 B T.

A pinon pine, 7 ins. dia., bears S.47°W., 53 lks.

dist..mkd.T 33 S R 8 W S 27 B T.

A pinon pine, 7 ins. dia., bears N.56°W., 22 lks.

dist..mkd.T 33 S R 8 W S 22 B T.

The course of this line is therefore E.89°55'E., 79.60 chs.

W.32.00 chs. is nearly level land in Parowan valley, covered with dense sage except where it is cultivated. Soil, sandy loam about 8 ft. deep, rich and productive. gravelly subsoil. Grain and corn had been grown on the cultivated land. E.47.60 chs. is on rough west slope of mountain, Heavy cedar and pinon pine timber. Soil, red sand and clay about 8 ins. deep, red sandstone subsoil. Some good grass for grazing.

Mountainous or heavily timbered land, or land covered with dense undergrowth, 79.80 chs.

September 5, 1910: At this cor. I set off 6°57'N., on the decl. arc; and at 11 h 59 m a.m., l.m.t., I observe the sun on the meridian, the resulting lat. is 37°56'N., which is the proper lat. nearly.

North, on a retracement line bet. secs. 22 and 23.

Over mountainous land; through heavy cedar and pinon pine timber.

Desc.

1.00 Top of ridge, 10 ft. above cor., bears N.40°E. and S.40°W.

Desc.

5.00 Bottom of gulch, 50 ft. below ridge, course W.

Asc.

7.00 Top of spur, 40 ft. above gulch, bears E. and W.

Desc.

8.00 Bottom swale, 40 ft. below spur, course W.

Retracement Subdivision of T.33 S., R.8 W.-Continued.

Chains	
	Asc.
9.25	Top of ridge, 30 ft. above swale, bears N.20°W. and S.60°E.
	Desc.
25.00	Bottom of hollow, 100 ft. below ridge, course NW 1.00 chs. thence N.
	Asc.
32.00	Bottom of same hollow, course N.20°E.
	Asc.
40.11	Fall 47 lks. W. of the $\frac{1}{4}$ sec.cor. bet. secs. 22 and 23, which is a cedar, 14 ins. in dia., mkd. and witnessed as described by the surveyor general. The tree is partly dead; therefore I destroy the old cor. and re-establish it in the same place as follows: Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for $\frac{1}{4}$ sec.cor.. mkd. on brass cap $\frac{1}{4}$ S 22 in W. half; and S 23 in E half; from which A pinon pine, 16 ins. dia., bears N.89°E., 15 lks. dist.. mkd. $\frac{1}{4}$ S 23 B T. A pinon pine, 8 ins. dia., bears S.57°W., 39 lks. dist.. mkd. $\frac{1}{4}$ S 22 B T.
49.00	Bottom of hollow, same as crossed at 32.00 chs., 100 ft. below hollow, course N.30°W. Continue descent.
53.60	Begin abrupt descent, bears NE and SW..
67.00	Bottom of ravine, 60 ft. deep, course N.40°W.. Continue descent.
75.30	Foot of steep descent, 300 ft. below $\frac{1}{4}$ sec.cor., bears N.60°E. and S.60°W. Enter valley, bears N.60°E. and S.60°W. Desc. gradually.
80.30	Fall 199 lks. W. of the cor. of secs. 14, 15, 22, and 23, which is a white sandstone, 20x8x8 ins., above ground, loosely set, mkd. and witnessed as described by the surveyor gen- eral. I destroy the old cor. and re-establish it in the

Retracement Subdivision of T.33 S., R.8 W.-Continued.

Chains

same place as follows:

Set an iron post, 5 ft. long, 2 ins. in dia., 24 ins. in the ground, for cor. of secs. 14, 15, 22, and 23, mkd. on brass cap

T 33 S § 15 in NW.

R 8 W S 14 in NE.

S 23 in SE.; and

S 22 in SW quadrants; and raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$ ft. high, W. of cor.

The course of the south half of this mile is therefore N.0°40'E., 40.11 chs., the north half is N.2°10'E., 40.22 chs.

S.75.50 chs. over rough mountainous land; sloping north westerly, covered with sandstone and limestone rocks and boulders. Soil, clay and calcareous from 8 to 12 ins. deep, on subsoil of clay and gravel. Heavy cedar and pinon pine timber. H.5.01 chs. in Parowan valley, nearly level. Soil rich sandy and clay loam, about 3 ft. deep, the ground is well covered with sandstone boulders. Dense sage brush. Clay subsoil. Good grass. No timber.

Mountainous or heavily timbered land, or land covered with dense undergrowth, 80.33 chs.

East, on a retracement line bet. secs. 14 and 23.

40.00 Find no trace of the old $\frac{1}{4}$ sec. cor. Set temp. $\frac{1}{4}$ sec. cor.

80.00 Find no trace of the old cor. of secs. 15, 14, 23, and 24.

Set temp. cor. of secs. 15, 14, 23, and 24.

September 5, 1910.

September 6, 1910: At 6 h 59 m a.m., I set off

Retracement Subdivision T.33 S., R.8 W.-Continued.

Chains	37°56'N., on the lat. arc; 6°41'N., on the decl. arc; and determine a meridian with the solar, at the temp. cor. of secns. 13, 14, 23, and 24. Thence I run (from temp. cor. just set) North, on retracement line bet. secns. 13 and 14.
40.00	Find no trace of the old sec. cor. bet. secns. 13 and 14. Set temp. i sec. cor.
81.66	Walk 180 lks. East of the cor. of secns. 11, 12, 13, and 14, which is a cedar 15 ina. in dia., mka. and witnessed as described by the surveyor general. The marks are partly overgrown; therefore I destroy the old cor. and re-establish it in the same place as follows: Set an iron post, 2 ft. long, 2 ina. in dia., 24 ina. in the ground, for cor. of secns. 11, 12, 13, and 14, mka. on brass cap T 33 S 8 11 in NW. R 8 W 3 12 in NE. S 13 in SE.; and S 14 in SW quadrants; from which A pinon pine, 6 ina. dia., bears S. 7°30'W., .75 lks. dist., mka. T 33 S 8 7 S 14 N E. A pinon pine, 11 ina. in dia., bears N. 81°30'W., .84 lks. dist., mka. T 33 S 8 7 S 11 N E. No other trees within limits; raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor. Note: Before proceeding with the re-establishment of the lines bet. secns. 13 and 14 and 14 and 23 I decide to retrace the north and west bds. of sec. 14 to verify the corners already found.
2.00	N. 89°39'W., on a retracement line bet. secns. 11 and 14. Over mountainous land; through heavy timber and scattering undergrowth. Bottom of hollow, 100 ft. below cor., course NW.

Retracement Subdivision of T.33 S., R.8 W.-Continued.

- Chains
- Asc.
- 5.00 Top of butte, 75 ft. high, bears NW and SE.
- Desc.
- 7.40 Top of ledge, 50 ft. high, bears N.30°W. and S.30°E.
- 8.00 Bottom of hollow, 100 ft. below butte, bourse NW.
- Asc.
- 13.40 Top of spur, 90 ft. above hollow, bears N.35°W. and S.35°E.
- Desc.
- 20.60 Foot of descent, 125 ft. below spur, bears N. and S.
Leave timber and enter dense sage brush, bears N. and S.
Enter valley.
- 36.54 Fall 15 lks. N. of the $\frac{1}{4}$ sec. cor. bet. secs. 11 and 14, which is a sandstone, 6x10x8 ins., above ground, firmly set, and mkd. and witnessed as described by the surveyor general. I destroy the old cor. and re-establish it in the same place as follows:
Set an iron post, 5 ft. long, 1 in. in dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor.. mkd. on brass cap $\frac{1}{4}$ S 11 in N half, and S 14 in S half; dig pits, 18x18x12 ins., E. and W. of post, 3 ft. dist.; and raise a mound of earth, $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high, N. of cor.
- 38.70 Corner of fence, bears S.40°E. and W.
Thence along fence.
- 77.90 Corner of fence, bears E. and S.
- 78.40 Fall 30 lks. N. of the cor. of secs. 10, 11, 14, and 15, which is a sandstone, 8x14x10 ins., above ground, firmly set, and mkd. and witnessed as described by the surveyor general. I destroy the old cor. and re-establish it in the same place as follows:
Set an iron post, 5 ft. long, 2 in. in dia., 24 ins. in the ground, for cor. of secs. 10, 11, 14, and 15, mkd. on brass cap
T 33 S 8 10' in NW.
R 8 W S 11 in NE.
S 14 in SE.; and

Retracement Subdivision T.33 S., R.8 W.-Continued.

Chains

S 15' in SW. quadrants; dig pits, 18x18x12 ins., in each sec.; 5½ ft. dist.; and raise a mound of earth, 4 ft. base, 1½ ft. high, W. of cor.

The course of this line is therefore N.89°52'W. 78.40 chs. E. 20.60 chs. rough and steep on West slope of mountain, covered with sandstone rock and some ledges. Soil, is dry sandy loam, about 6 ins. deep, subsoil sandstone. Timber heavy cedar and pinon pine. Scattering sage brush. W. 57.80 chs. is nearly level valley, sloping gently to the west. Soil, rich sandy loam about 4 ft. deep, with gravelly subsoil. A few scattering sandstone boulders. Dense sage brush.

Mountainous or heavily timbered land, or land covered with dense undergrowth, 78.40 chs.

September 6, 1910: At this cor. I set off 6°35'N. on the decl. arc, and at 11h 59m a.m.l.m.t., observe the sun on the meridian; the resulting lat. is 37°05'N. which is the proper lat., nearly.

South, on retracement line bet. secs. 14 and 15.

Over nearly level valley; through dense sage brush.

17.40

Hence, bears N.2°E. and S.2°W.

40.63

Fall 18 lks. E. of the ¼ sec. cor. bet. secs. 14 and 15, which is a white sandstone, 6x10x8 ins., above ground, firmly set, and mkd. and witnessed as described by the surveyor general.

I destroy the old cor. and re-establish it in the same place as follows:

Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for ¼ sec. cor. mkd. on brass cap ¼ S 15 IN W. half and S 14 in E half; dig pits, 18x18x12 ins. N. and S. of post, 5 ft. dist.; and raise a mound of earth, 3½ ft. base, 1½ ft. high, W. of cor.

Retracement Subdivision of T.33 S., R.8 W.-Continued.

Chains	
61.60	Same fence, bears N.1°W. and E.
81.60	Fall 37 lks.E.of the cor.of secs.14,15,22, and 23, heretofore described. The course of this line is therefore S.0°16'W., 81.60. chs. Entire mile is nearly level land in Parowan Valley. Soil, rich sandy and clay loam, about 4 ft. deep, a few rocks on S.10 chs. Dense sage brush on entire mile. Land covered with dense sage brush, 81.60 chs.

September 6, 1910.

September 7, 1910: At 6 h 58 m a.m., l.m.t., I set off 57° 57' N., on the lat.arc; 6°18' N., on the decl.arc; and determine a meridian with the solar, at the cor.of secs. 11,12, 13, and 14.

Thence I run

South, on a random line bet.secs.13 and 14.

40.00 Set temp. $\frac{1}{2}$ sec.cor.

80.00 Set temp.cor. of secs.13,14,23, and 24.

Thence I run

West, on random line bet.secs.14 and 23.

40.00 Set temp. $\frac{1}{2}$ sec.cor.

78.84 Intersect N.and S.line, 167 lks.N. of the cor.of secs.14, 15, 22, and 23.

Thence I run

East, on a true resurvey line.bet.secs.14 and 23,

Over nearly level valley; through dense sage brush.

Asc.gently.

.50 Leave valley, bears N.and S.

Asc.abruptly.

10.60 Top of steep ascent, 200 ft.above valley, bears N.30°W. and S.30°E.

Resurvey Subdivision of T.33 S., R.8 W.

Chains	
	Asc. gradually.
12.00	Top of spur, 250 ft. above valley, bears N. and S. Desc.
12.10	Enter heavy cedar and pinon pine timber, bears N. and S.
14.80	Wash, 20 lks. wide, 4 ft. deep, in bottom of ravine 100 ft. deep, course N.20°W.
	Asc.
15.50	Begin steep ascent; bears N.20°W. and S.20°E.
25.80	Top of spur, 180 ft. above ravine, bears N. and S. Desc.
25.40	Bottom of hollow, 50 ft. below spur, course N. Asc.
32.70	Top of spur, 60 ft. above hollow, bears N.10°W. and S.10°E Desc.
34.00	Wash, 30 lks. wide, 8 ft. deep, course N.30°W., in swale, 40 ft. below spur, course N.30°W.
37.20	Top of ridge, 150 ft. above swale, bears N.40°W. and S.40° E. Desc.
39.42	Find no trace of old 1/2 sec.cor. Set an iron post, 3 ft. long, 1 in. in dia., 36 ins. in the ground, for 1/2 sec.cor.. Nkd. on brass cap & S 14' in N half and S 23' in S half; and raise a mound of stone, 2 ft. base, 1 1/2 ft. high, N. of cor.
41.00	Begin abrupt descent, bears N. and S.
47.60	Bottom of hollow, 150 ft. below ridge, course N. Asc. abruptly.
54.50	Top of spur, 150 ft. above hollow, bears N.30°W. and S.30° E. Desc. abruptly.
62.40	Bottom of hollow, 140 ft. below spur, course N.40°W. Asc.
78.84	Intersect xxx .line bet. secs. 13 and 14 (extended) 1.65 chs. South of the temp.cor. of secs. 13, 14, 23, and 24, set this day and intersect temp.cor. of secs. 13, 14, 23 & 24 set

Resurvey Subdivision T.33 S., R.8 W.-Continued.

Chains

Sept. 5; At point of intersection

Set an iron post, 5 ft. long, 2 ins. in dia., 24 ins. in the ground, for cor. of secs. 13, 14, 23, and 24, mkd. on brass cap

T 33 S S 14 in NW.

R 8 W S 13 in NE.

S 24 in SE.; and

S 23 in SW. quadrants; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.

W.50 lks. is in Parowan valley, good rich soil. Balance of mile is over rough broken ridges and hollows, draining and sloping northwesterly. Soil, red sand and gravel about 6 ins. deep, gravelly and sandy subsoil. Land is well covered with sandstone rocks and boulders. A very little grass. Timber, cedar and pinon pine. Undergrowth, sage brush. Mountainous or heavily timbered land, or land covered with dense undergrowth, 78.84 chs.

September 7, 1910: At this cor. I set off $6^{\circ}12' N.$, on the decl. arc; and at 11 h 58 m a.m., l.m.t., I observe the sun on the meridian, the resulting lat. is $37^{\circ}56' N.$, which is the proper lat. nearly.

North, on a true resurvey line bet. secs. 13 and 14, over mountainous land; through scattering timber and dense sage brush.

Asc.

1.50 Top of spur, 50 ft. above cor., bears NW and SE.

Desc.

10.50 Bottom of hollow, 100 ft. below spur, course N.30°W.

Asc.

29.00 Top of spur, 75 ft. above hollow, bears E. and W.

Desc.

33.50 Bottom of hollow, 50 ft. below spur, course W.

Asc.

Resurvey Subdivision of T.35 S., R.8 W.-Continued.

Chains	
40.83	Set an iron post, 3 ft. long, 1 in. in dia., 20 ins. in the ground, on solid rock, and surrounded by mound of stone, for $\frac{1}{4}$ sec.cor.. Marked on brass cap $\frac{1}{4}$ S 14' in W half and S 15' in E half; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.
45.70	Top of ridge, 90 ft. above hollow, bears N. and SE. Desc. gradually along top of ridge.
56.80	Leave ridge, bears NW and S. Desc.
66.50	Bottom of hollow, 50 ft. below ridge, course NW. comes from E. Asc.
75.00	Top of ridge, 175 ft. above hollow, bears NW and SE. Desc.
77.60	Bottom of hollow, 150 ft. below ridge, course NW. Comes from, E. Asc.
80.00	Top of spur, 180 ft. above hollow, bears NW and SE. Desc.
81.66	The cor.of secs.11,12,13, and 14. Entire mile is rough and broken, covered with rock .Soil, red sand and clay,dry and hard, about 8 ins.deep, subsoil, sand and clay .Timber, cedar and pinon pine.Undergrowth, sage brush.A very little grass . Mountainous or heavily timbered land, 81.66 chs.
	North, on retrace ment line bet.secs.11 and 12.
40.00	Find no trace of old $\frac{1}{4}$ sec.cor. Set temp.cor.
80.00	Find no trace of the cor.of secs.1,2,11, and 12. Set temp.cor.

September 7, 1910.

Retracement Subdivision of T.35 S., R.8 W.-Continued.

Chains	
	September 8, 1910: At 6 h ¹ 58 m a.m., l.m.t., I set off 57° 58' N., on the lat.arc; 5° 56' N., on the decl.arc; and determine a meridian with the solar, at the ^{temp} cor.of secs. 1, 2, 11, and 12.
	Thence I run N. 89° 47' E., on a retracement line bet.secs. 1 and 12.
40.00	Find no trace of old cor. Set temp. ¹ sec.cor.
83.04	Intersect E.bdy.of Tp., 103 lks. South of the cor.of secs. 1, 6, 7, and 12, heretofore described.
	From the temp.cor.of secs. 1, 2, 11, and 12,
	I run
	North, on retracement line bet.secs. 1 and 2.
40.00	Find no trace of old ¹ sec.cor.
78.36	Intersect N.bdy.of Tp., 140 lks. East of the cor.of secs. 1, 2, 35, and 36, which is the remains of a charred post, witnessed as described by the surveyor general.
	I re-established the cor.at this point as follows.
	Set an iron post, 3 ft.long, 3 ins.in dia., 24 ins.in the ground, for cor.of secs. 1, 2, 35, and 36, mkd.on brass cap
	T 32 S S 35 in NW.
	R 8 W S 36 in NE.
	R 8 W S 1 in SE.; and
	T 33 S S 2 in SW quadrants; dig pits, 18x18x12 ins.in each sec. 5½ ft.dist.; and raise a mound of earth, 4 ft.base, 2 ft.high, W.of cor.
	September 8, 1910: At this cor.I set off 5° 50' W., on the decl.arc; and at 11 h ¹ 58' m a.m., l.m.t., I observe the sun on the meridian, the resulting lat.is 57° 59' W., which is the proper lat.nearly.

Retracement Subdivision of T.33 S., R.8 W.-Continued.

Chains	From the temp.cor.of secs.1,2,11, and 12. I run West, on retracement line bet.secs.2 and 11.
40.00	Find no trace of old $\frac{1}{4}$ sec.cor. Set temp. $\frac{1}{4}$ sec.cor.
81.41	Intersect N.and S.line, 38 lks.N.of the cor.of secs.2,3,10, and 11, which is a white sandstone; 12x8x8 ins. above ground, loosely set, and mkd. and witnessed as described by the surveyor general. I destroy the old cor. and re-establish the cor. in the same place as follows: Set an iron post, 3 ft.long, 2 ins.in dia., 24 ins.in the ground, for cor.of secs.2,3,10, and 11, mkd.on brass cap T 33 S S 3 in NW. R 8 W S 2 in NE. S 11 in SE.; and S 10 in SW.quadrant; dig pits, 18x18x12 ins., in each sec. $5\frac{1}{2}$ ft.dist., and raise a mound of earth, 4 ft.base, 2 ft.high, W.of cor.

September 8, 1910.

September 9, 1910: At 6 h 58 m a.m., l.m.t., I set off $57^{\circ} 57' N.$, on the lat.arc; $5^{\circ} 33' W.$, on the decl.arc; and determine a meridian with the solar, at the cor.of secs.11,12, 13, and 14.

Note: From retracement of line bet.secs.11 and 12 and 1 and 2 I calculate the course of the line from the cor.of secs.11,12,13, and 14 to the cor.of secs.1,2,35, and 36, to be $N.0^{\circ}30'W$ and the distance 158.36 chs.; and from the

Resurvey Sub.T.33 S., R.8 W.- Contirued.

Chains.

cor.of secs.2,3,10 and 11 to cor.of secs.1,6,7 and 12
on E.boundary is N. $89^{\circ} 24' E.$ 164.46 chs.

From the middle point of the north and south line I
measure east 152 lks., and from the middle point of
the east and west line I measure south 130 lks. to an
intersection, which is the true point for the cor.of
secs.1,2,11, and 12,

Set an iron post 3 ft.long, 2 ins.in dia., 24 ins.in the
ground, for the re-established cor.of secs.1,2,11, and
12, marked on brass cap

T 33 S S 3 in NW.

R 8 W S 1 in NE.

S 12 in SE; and

S 11 in SW.quadrants; dig pits 18 x 18 x 12 ins.,
in each sec. $5\frac{1}{2}$ ft.dist.; and raise a mound of earth
4 ft.base, 2 ft.high W.of cor.

With this corner established, the true courses and dis-
tances of the four lines to be re-established are as
follows:

The line betsecs.11 and 12, N. $0^{\circ} 35' E.$ 79.18 chs.

The line betsecs.1 and 12, N. $88^{\circ} 30' E.$ 82.23 chs.

The line betsecs.2 and 11, N. $89^{\circ} 42' W.$ 82.23 chs.

The line betsecs.1 and 2, N. $1^{\circ} 35' W.$ 79.18 chs.

I now proceed to re-establish these lines, placing the
 $\frac{1}{4}$ sec.cors.midway, in each instance.

N. $0^{\circ} 35' E.$ on a true resurvey line bet.
secs.11 and 12,

Over mountainous land; through heavy cedar and pinon
pine timber.

Descend.

2.40 Bottom of swale, 40 ft.below section corner, course

Resurvey Subdivision T. 33 S., R. 8 W.- Continued

Chains.

West.. Ascend..

7.25 Top of spur, 40 ft.above hollow, bears E.and W.

Descend.

9.25 Bottom of hollow, 65 ft.below spur, course W.

Ascend.

11.90 Top of spur, 60 ft.above hollow, bears NW. and SE.

15.00 Bottom of gulch, 60 ft.below spur, course NW.

Ascend.

17.50 Top of spur, 50 ft.above gulch, bears E.and W. Desc.

25.00 Bottom of hollow, 50 ft.below spur, course W.

Ascend.

26.80 Top of spur, 40 ft.above hollow, bears E.and W.

Descend.

33.40 Foot of descent; 200 ft.below spur, bears N. 40° E. andS. 40° W. Leave timber, bears N. 40° E. and S. 40° W.Enter dense sagebrush, bears N. 40° E. and S. 40° W.Enter valley, bears N. 40° E. and S. 40° W.

39.59 Set an iron post 3 ft.long, 1 in.in diameter, 26 ins.in

the ground, for $\frac{1}{4}$ section corner, marked on brass cap $\frac{1}{4}$ S 11 in W.half,

S 12 in E.half,

dig pits 18 x 18 x 12 ins.north and south of post 3 ft.

dist.; and raise a mound of earth $3\frac{1}{2}$ ft.base, $1\frac{1}{2}$ ft.

Resurvey Subdivision of T.33 S., R.8 W.-Continued.

Chains	
	10 ft. 15'., and twice as high. I observed, the surface, 11 ft. high, W. of cor.
48.50	South edge of wash, 250 lks. wide, 2 ft. deep, course W.
79.18	The cor. of secs. 1, 2, 11, and 12. S. 33.40 chs. over rough broken land, a series of ridges and hollows, sloping and draining westerly. Covered pretty well with loose rock. Heavy cedar and pinon pine timber. Soil, red sand and clay, 6 to 12 ins. deep, dry and hard. Subsoil sandstone. A little grass. N. 45.78 chains is in Parowan valley sloping gently to the northwest. Soil, sandy loam about 2 ft. deep, subsoil clay.
	Mountainous or heavily timbered land, or land covered with dense undergrowth, 79.18 chs.
	September 9, 1910: At this cor. I set off 5°27' N., on the decl. arc; and at 11 h 58 m a.m., l.m.t., I observe the sun on the meridian, the resulting lat. is 37°58' N., which is the proper lat. nearly.
	<hr/>
	N. 80°30' E., on a true line bet. secs. 1 and 12. Over nearly level valley; through dense sage brush. Asc. gently.
20.00	Enter heavy timber, bears N. and S.
28.00	Leave sage brush and enter dense oak, maple, and mahogany undergrowth, bears N. and S.
29.20	Leave undergrowth, bears N. and S.
30.50	Leave valley, bears N. and S. Asc. abruptly.
34.60	Top of spur, 60 ft. above valley, bears N. and S. Desc.
36.30	Bottom of hollow, 40 ft. below spur, course S. 40°W. Asc.
41.11½	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the

Resurvey Subdivision of T.53 S., R.8 W.-Continued.

Chains	
	ground, for $\frac{1}{4}$ sec.cor..mkd.on brass cap $\frac{1}{4}$ S 1' in N half and S 12' in S half; and raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$ ft. high, N. of cor. At this cor. the available trees are too scrubby and rough to mark for bearing trees.
41.80	Top of spur, 70 ft. above hollow, bears N. and S. Desc.
45.20	Bottom of swale, 60 ft. below spur, course N.40°W. Asc.
49.50	Top of spur, 75 ft. above swale, bears N. and S. Desc.
56.00	Bottom of hollow, 60 ft. below spur, course N. Asc.
62.20	Top of spur, 80 ft. above hollow, bears N.10°W. and S.10°E Desc.
70.00	Bottom of hollow, 75 ft. below spur, course N.15°W. Asc.
73.50	Top of spur, 65 ft. above hollow, bears N.20°W. and S.20°E Desc.
76.00	Bottom of swale, 20 ft. below spur, course NW. Asc.
82.23	The cor.of secs.1,6,7, and 12. W.30.50 chs.in Parowan valley gentle slope northwest. Soil, rich sandy and clay loam, about 1 $\frac{1}{2}$ ft. deep, subsoil clay .Timber, cedar and pinon pine.Undergrowth, sage brush. Good grass . E.51.73 chs.Rough and steep ridges and hollows,draining NW.Lots of loose rock.Soil, sandy and clay 7 to 12 ins. deep,in places washed away leaving bare rocks and hard clay beds. Mountainous or heavily timbered land,or land covered with dense undergrowth,82.23 chs.

Resurvey. Subdivision of T.33 S., R.8 W.-Continued.

Chains	
	N.89°42'W., on a true line bet. secs. 2 and 11.
	Over nearly level valley; through dense sage brush.
10.00	Leave dense sage and enter scattering sage brush, bears N. and S.
39.45	Wire fence, bears N. and S. and W.
41.11	Set an iron post, 5 ft. long, 1 in. in dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor.. mkl. on brass cap $\frac{1}{4}$ S 2' in N half and S 1' in S half; dig pits, 18x18x12 ins., E and W of post, 3 ft. dist.; and raise a mound of earth, $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high, N. of cor.
81.96	Wire fence, bears N and S and E.
82.23	The cor. of secs. 2, 3, 10, and 11. Land, nearly level valley. Soil, sandy and clay loam; 1st rate, well adapted to dry farming. No timber. Undergrowth, sage brush. Some grass. Land covered with dense sage brush, 10.00 chs.
	N.1°35'W., on a true line bet. secs. 1 and 2.
	Over nearly level valley; through dense sage brush.
6.00	Wood road, bears N.60°E. and S.60°W.
13.60	Wash, 20 lks. wide, 3 ft. deep, course N.70°W.
39.59	Set an iron post, 5 ft. long, 1 in. in dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor.. mkl. on brass cap $\frac{1}{4}$ S 2' in W half and S 1' in E half; dig pits, 18x18x12 ins. N. and S. of post, 3 ft. dist.; and raise a mound of earth, $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft high, W. of cor.
62.00	Wash, 40 lks. wide, 3 ft. deep, course W.

Resurvey Subdivision T.55 S., R.8 W.-Continued.

Chains

79.16 The cor. of secs. 1, 2, 35, and 36.

Land, nearly level valley.

Soil, clay and sandy loam; 1st rate.

No timber.

Undergrowth, sage brush.

Good grass.

Land covered with dense undergrowth, 79.16 chs.

September 9, 1910.

Dunby Stewart

Instrumentman, G.I.O.

Subdivision of T.33 S., R.8 W.

Survey commenced September 19, 1910, and executed with a W. and L.E. Hurley Explorer's transit, No. 795, with solar attachment. The horizontal limb is provided with two double verniers placed opposite to each other, reading to single minutes of arc; which is also the least count on the latitude and declination arcs.

The instrument was examined, tested on the meridian at Salt Lake City, found correct, and was approved by the surveyor general, for Utah, on August 6, 1910.

At the cor. of secs. 25, 30, 31, and 36, on E. bdy. of Tp., latitude $37^{\circ}54'45''N.$, longitude, $112^{\circ}59'47''W.$, I set off $37^{\circ}55'N.$, on the lat. arc; $5^{\circ}33'N.$, on the decl. arc.; and at 6 h 57'm a.m., l.m.t., I determine a meridian with the solar.

Note: For complete test of instrument see notes of E. bdy. T.33 S., R.8 W.

Note: On account of the S. bdy. being out of limits in alignment and measurement I run

West, on sectional line, bet. secs. 25 and 36.

Over mountainous land; through heavy cedar and pinon pine timber.

Desc.

5.00 Bottom of hollow, 100 ft. below cor., course N.

Enter dense undergrowth, bears N. and S.

Leave heavy and enter scattering timber, bears N. and S.

Asc.

9.75 Top of spur, 100 ft. above hollow, bears NW and SE.

Desc.

13.50 Head of hollow, 75 ft. below spur, course N.

Asc.

16.00 Enter heavy cedar and pinon pine timber, bears N. and S.

Leave dense and enter scattering undergrowth, bears N. and S.

22.00 Top of ridge, 250 ft. above hollow, bears NW and SE.

Desc.

Subdivision of T.33 S., R.8 W.-Continued.

Chains	
	Desc.
32.20	Bottom of hollow, 100 ft. below ridge, course S.10°W. Asc.
35.00	Top of spur, 50 ft. above hollow, bears N. and S. Desc.
40.00	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for cor. mkd. on brass cap T 25 in N half and S 36 in S half.; from which A pinon pine, 12 ins. in dia., bears N.34°W., 30 lks. dist..mkd.T 25 B T.
	A pinon pine, 19 ins. dia., bears S.24°W., 20 lks. dist..mkd.T 36 B T.
45.00	Head of hollow, 100 ft. below spur, course S. Asc.
57.00	Leave timber, enter dense sage, bears N. and S. Asc. abruptly.
65.00	Top of ridge, 100 ft. above hollow, bears N. and S. Desc.
72.40	Bottom of hollow, 100 ft. below spur, course S.10°W. Asc.
80.00	Set an iron post, 3 ft. long, 2 ins. dia., 16 ins. in the ground, on solid rock, and surrounded by mound of earth and stone, for cor. of secs. 25, 26, 55, and 36, mkd. on brass cap T 53 S S 26' in NW. R 8 W S 25' in NE. S 36' in SE. ; and S 35' in SW. quadrants; from which A pinon pine, 6 ins. dia., bears N.75°30'E., 45 lks. dist..mkd.T 53 S R 8 W S 25 B T.
	A pinon pine, 6 ins. dia., bears S.45°30'E., 12 lks. dist..mkd.T 53 S R 8 W S 36 B T.
	A pinon pine, 5 ins. dia., bears S.68°30'W., 32 lks. dist..mkd.T 53 S R 8 W S 55 B T.
	A cedar, 5ins. dia., bears N.62°30'W., 22 lks. dist..mkd.T 53 S R 8 W S 26 B T.
E.22.00	chs.on north slope of ridge, draining into Little Creek. Soil, rich black loam, about 2 ft. deep, producing

Subdivision of T.33 S., R.8 W.-Continued.

Chains

either heavy cedar and pinon pine timber or dense oak, service berry, larch, and buck brush and in places both. Subsoil, clay and gravel. Good grass. W.58 chs. slopes and drains southward into Red Creek, slopes gradual. Soil, red and white clay medium texture, about 1 ft. deep, subsoil, clay. Some loose rock on top of ground. Timber, heavy cedar and pinon pine. Undergrowth, scattering sage and buck brush. Grass scattering.

Mountainous or heavily timbered land, or land covered with dense undergrowth, 80.00 cbs.

September 9, 1910: At this cor. I set off 5°27' N., on the decl. arc; and at 11 h^o 58'm.a.m., l.m.t., I observe the sun on the meridian, the resulting lat. is 37°55' N., which is the proper lat. nearly.

West, on sectional correction line bet. secs. 26 and 35. Knowing from retracements made that the line will not intersect the cor. of secs. 26, 27, 34, and 35, within limits. Over mountainous, and through heavy cedar and pinon pine timber and scattering sage brush.

Asc.

16.20 Top of ridge, 300 ft. above sec. cor., bears N.20°W. and S.20°E
Desc.

18.00 Bottom of swale, 50 ft. below ridge, course S.
Asc.

36.40 Top of spur, 80 ft. above hollow, bears N.20°W. and S.20°E.
Desc.

40.00 Set an iron post, 3 ft. long, 1 in. in dia., 18 ins. in the ground, on bed rock, and surrounded by mound of earth and stone, for $\frac{1}{2}$ sec. cor., mkl. on brass cap $\frac{1}{2}$ S 26 in N. half and S 35 in S half; from which

A pinon pine, 18 ins. dia., bears N.75°W., 31 lks.

Subdivision of T.33 S., R.8 W.-Continued.

	Chains	dist.mkd. $\frac{1}{2}$ S 26 B.T. A pinon pine, 30 ins. dia., bears S.50°E., 49 lbs. dist..mkd. $\frac{1}{2}$ S 35 B.T.
58.50		Bottom of hollow, 80 ft. below spur, course N.15°W. Asc.
63.80		Top of spur, 50 ft. above hollow, bears N.20°W. and S.20°E. Desc.
68.60		Bottom of hollow, 50 ft. below spur, course N. Asc.
70.40		Top of spur, 20 ft. above hollow, bears N. and S. Desc.
75.00		Bottom of swale, 30 ft. below spur, course N.60°E. Asc.
80.00		Set temp.sec.cor.pending the establishment of the cor. of secs.27 and 34. Later: On Septe.12 this connection was made and cor.set as follows:
84.02		Intersect N. and S.line, 1.22 chs.S.of the cor.of secs. 26, 27, 34, and 35, hereafter described in notes of line bet.secs.27 and 34. Set an iron post, 3 ft.long, 2 ins.in dia., 24 ins.in the ground, for closing cor.of secs.26 and 35,mkd.on brass cap
		T 33 S.R 8 W in N half. C C S 27 S 34 in W.half. S 26 in NE.; and S 35 in SE.quadrants; and raise a mound of stone, 2 ft.base; 1 $\frac{1}{2}$ ft.high, E.of cor. Note:I destroy the marksoon the cor.of secs.26, 27, 34, and 35, which pertain to secs.26 and 35. Land, mountainous ,high and somewhat rolling ... Soil, clay loam, about 1 ft.deep, subsoil, gravel. Timber, heavy cedar and pinon pine. Undergrowth, sage and buck brush and mahogany.

Subdivision of T.33 S., R.8 W.-Continued.

Chains

Good grass for grazing.

Mountainous or heavily timbered land, or land covered with dense undergrowth, 84.02 chs.

September 9, 1910.

September 10, 1910: At 6 h 57 m a.m., l.m.t., I set off $37^{\circ}55'N.$, on the lat.arc; $5^{\circ}11'N.$, on the decl.arc; and determine a meridian with the solar, at the cor.of secs. 25, 26, 35, and 36.

Thence I run

$S40^{\circ}11'E.$, on a true line betsecs. 35 and 36.

Over mountainous land; through heavy cedar and pinon pine timber and scattering sage brush.

Desc.

13.40 Leave timber, bears E. and W.

Enter dense oak and rose brush and willows, bears E. and W.

16.60 Canon road, bears E. and W.

17.90 Red creek, 12 lks.wide, 1 ft.deep, medium current, good water, in bottom of Red Creek Canon, 500 ft.below sec. cor., course W.

Asc.

21.10 Leave undergrowth and enter heavy timber, bears E. and W.

39.00 Foot of sloping ledge, bears E. and W.

40.00 Falls on sloping ledge where cor.cannot be perpetuated therefore at

40.40 Top of ledge, bears E and W.

Set an iron post, 3 ft.long, 1 in.in dia., 12 ins.in the ground, on bed rock, and surrounded by mound of earth and stone, for witness cor.to $\frac{1}{4}$ sec.cor..rkd.on brass cap

T 33 S R 8 $\frac{1}{2}$ in N half.W C $\frac{1}{4}$ S 55 in W half and S 36¹ in E.

Subdivision of T.35 S., R.8 W.-Continued.

Chains	half; from which
	A cedar, 16 ins. dia., bears S.70° E., 3 lks. dist..mkd.W C $\frac{1}{4}$ S 36 B T.
	A pinon pine, 6 ins. dia., bears S.50° W., 10 lks. dist..mkd.W C $\frac{1}{4}$ S 35 B T.
	Enter dense undergrowth, bears E. and W.
46.40	Top of ridge, 600 ft. above canon, bears NW and SE. Leave undergrowth, bears NW and SE. Desc.
58.50	Bottom of hollow, 100 ft. below ridge, course N.70° W. Asc.
64.50	Top of spur, 50 ft. above hollow, bears E. and W. Desc.
77.01	Intersect S.bdy.of Tr., 8.22 chs. N, 89°24' E., of the cor. of secs. 1, 2, 35, and 36, heretofore described. Set an iron post, 3 ft. long, 2 ins. in dia., 14 ins. in the ground, embedded rock, and surrounded by mound of earth and stone, for closing cor.of secs. 35 and 36, mkd.on brass cap C C T 34 S R 8 W S 35 2 in-S half. T 33 S S 35 in NW. R 8 W S 36 in NE. quadrants; from which A pinon pine, 6 ins. dia., bears N.26° E., 21 lks. dist..mkd.T 33 S R 8 W S 36 B T. A pinon pine, 6 ins. dia., bears N.44° W., 26 lks. dist..mkd.T 33 S R 8 W S 35 B T. Note : I destroy all marks on the cor.of secs. 1, 2, 35, and 36, which pertain to secs. 35 and 36. This entire mile is over mountainous land; through heavy timber or dense undergrowth. The slopes are steep and quite rocky. Soilclay loam, about 6 ins. deep, subsoil, gravel and rock. Timber, cedar and pinon pine; Undergrowth, oak, service berry, buck brush, and rose brush. Good grass. Mountainous or heavily timbered land, or land covered with dense undergrowth, 77.01 chs.

Subdivision of T.53 S., R.8 W.-Continued.

Chains	September 10, 1910: At this cor. I set off 5°04' N., on the decl. arc; and at 11 h 57 m a.m., l.m.t., I observe the sun on the meridian, the resulting lat. is 37°54' N., which is the proper lat. nearly.
	Knowing from retracements made that the line bet. secs. 25 and 26 will not close within limits;
	I run
	N. 0°01' W., on a true line bet. secs. 25 and 26.
	Over mountainous land; through heavy timber.
	Asc.
4.50	Top of ridge, 400 ft. above sec. cor., bears N. 80° E. and S. 80° W.
	Desc.
15.00	Leave timber and enter dense undergrowth, bears NE and SW.
30.00	Leave dense and enter scattering undergrowth, bears NE and SW. Enter heavy timber, bears NE and SW.
40.00	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., mkd. on brass cap $\frac{1}{4}$ S 26 in W half and S 25 $\frac{1}{4}$ in E half; from which A pinon pine, 12 ins. dia., bears N. 68° E., 20 lks. dist.. mkd. $\frac{1}{4}$ S 25 B T. A pinon pine, 8 ins. dia., bears N. 72° W., 4 lks. dist.. mkd. $\frac{1}{4}$ S 26 B T.
42.50	Top of conglomerate ledges, 75 ft. high, bears E. and W. Leave timber, bears E. and W.
43.50	Enter dense undergrowth, bears N. 70° E. and S. 70° W.
45.50	Road from Parowan to Panguitch, bears N. 75° E. and S. 75° W.
46.50	Little Creek, 5 lks. wide, 6 ins. deep, rocky bottom, rapid

Subdivision of T.53 S., R.8 W.-Continued.

Chains	current, in bottom of Little Creek Canon, 600 ft. below ridge, course S.70°W.
Asc.	
48.00	Leave undergrowth, bears N.70°E. and S.70°W.
53.00	Enter heavy cedar and pinon pine timber, bears E and W.
80.00	Set temp.sec.cor.pending the establishment of the cor.of secs. 23, 24, 25, and 26. Later: On Sept. 14, 1910, this connection was made, and closing cor.set as follows:
81.82	Intersect E. and W. line, 3.13 chs. East of the cor.of secs. 23, 24, 25, and 26, described hereafter in notes of line bet.secs. 23 and 26. Set and iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground, for closing cor.of secs. 25 and 26, mkd.on brass cap C C T 33 S R 8 W S 23 S 24 in N half. S 25 in SE.; and S 26 in SW. quadrants; from which A pinon pine, 10 ins. dia., bears S.35°E., 44 lks. dist..mkd.T 33 S R 8 W S 25 B T. A pinon pine, 14 ins. dia., bears S.37°30'W., 87 lks. dist..mkd.T 33 S R 8 W S 26 B T. Note: I destroy all marks on the cor.of secs. 23, 24, 25, and 26, which pertain to secs. 25 and 26. This mile is on high steep mountain slopes. Soil, clay loam about 8 ins. deep, on gravelly and rocky subsoil. Timber, cedar and pinon pine. Undergrowth, oak, service berry and mahogany. Good grass. Mountainous or heavily timbered land, or land covered with dense undergrowth, 81.82 chs.

September 10, 1910.


 Instrumentman G.I.O.

Subdivision of T.33.S., R.8.W.

Chains

Survey commenced September 12, 1910, and executed with a Young and Sons light mountain transit, No. 7582, with solar attachment. The horizontal limb is provided with two double verniers placed opposite to each other, reading to single minutes of arc; which is also the least count of the ^{NW} latitude and declination arcs.

The instrument was examined, tested on the meridian, at Salt Lake City, found correct and was approved by the surveyor general for Utah, on August 6, 1910.

Note: For complete test of instrument see notes of Re-tracement Subdivision T.33 S., R.8 W.

At the cor. of secs. 22, 23, 26, and 27, latitude $37^{\circ}55'35''$ N. longitude $112^{\circ}42'01''$ W. I set off $37^{\circ}56'N.$, on the lat. arc; $4^{\circ}25'N.$, on the decl. arc; and at 6 h 56'm.a.m., l.m.t., I determine a meridian with the solar.

Thence I run

South, on a random line bet. secs. 26 and 27.

40.00 Set temp. $\frac{1}{2}$ sec.cor.

80.00 Set temp.cor. of secs. 26, 27, 34, and 35.

Thence I run

$N\!e89^{\circ}55'W.$, on a random line bet. secs. 27 and 34.

39.65 Fall 66 lks.N. of the $\frac{1}{2}$ sec.cor. bet. secs. 27 and 34, heretofore described.

The falling is out of limits; therefore I begin at the $\frac{1}{2}$ sec.cor. and run

East, on a true line bet. secs. 27 and 34.

Over mountainous land; through heavy cedar and pinon pine timber.

Asc. abruptly over rocks and boulders.

28.25 Top of ridge, 500 ft. above sec.cor., bears N. and S.

Desc.

39.65 Intersect N. and S. line 60 lks. South of the temp.cor.

Subdivision of T.33 S., R.8 W.-Continued.

Chains	<p>Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground, for cor. of secs. 26, 27, 34, and 55, rivd. on brass cap T 33 S S 27 in NW. R 8 T S 26 in NE. S 35' in SE.; and S 34' in SW. quadrants; and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor. Land, rocky, steep, west slope of mountain. Soil, red sand and clay; about 1 ft. deep, subsoil, clay and gravel. Timber cedar and pinon pine. No grass. Mountainous or heavily timbered land, 39.65 cks. September 12, 1910. At the noon hour the sky is overcast and solar observations are impossible.</p> <hr/> <p>North, on true line bet. secs. 26 and 27. Over mountainous land; through scattering timber and dense undergrowth.</p> <p>Desc.</p> <p>4.70 Bottom of swale, 20 ft. below ridge, course E. Asc.</p> <p>11.30 Top of ridge, 100 ft. above swale, bears N and SW. Desc. along top of ridge.</p> <p>19.00 Leave ridge top, bears S. and N. 40° E. Desc.</p> <p>25.00 Begin abrupt descent, over rocks and boulders, bears E. and W.</p> <p>40.60 Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for ½ sec. cor.. rivd. on brass cap ½ S 27 in W half and S 26 in E half; and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.</p> <p>41.00 Feet of steep descent, 700 ft. below ridge, bears E. and W.</p>
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Subdivision of T.33 S., R.8 W.-Continued.

Chains	
41.20	Road from Parowan to Panguitch, bears E. and W.
41.50	Little Creek, 10 lks. wide, 8 ins. deep, in Little Creek Canon, course W. Asc.
42.50	Begin abrupt ascent, bears E. and W. over ledges and rocks.
61.40	Top of steep ascent, 600 ft. above canon, bears NE and SW. Leave ledges and rocks, bears NW and SE.
63.30	Top of ridge, 100 ft. above top of ledges, bears NE and SW. Desc.
68.60	Swale, 30 ft. below ridge, drains SW. Asc.
70.70	Top of spur, 50 ft. above swale, bears S.40°W. Desc.
74.00	Bottom of swale, 30 ft. below spur, drains SW. Asc.
75.80	Enter dense sage brush, bears NE and SW.
80.60	The cor. of secs. 22, 23, 26, and 27. Entire mile over high rough mountains with steep slopes rocky and ledges north of Little Creek canon. Soil, red sand 10 to 14 ins. deep, rock subsoil. Timber, cedar and piñon pine. Undergrowth, sage and oak brush. A little grass. Mountainous or heavily timbered land, or land covered with dense undergrowth, 80.60 chgs.

September 12, 1910.

September 13, 1910: At 6 h 57 m a.m., l.m.t., I set off 37°55' N., on the lat. arc; 4°02' W., on the decl. arc; and determine a meridian with the solar, at the cor. of secs. 26, 27, 34, and 35. Thence I run

Subdivision of T.35 S., R.8 W.-Continued.

Chains	S.0°1'E., on a true line bet. secs. 34 and 35. Knowing from retracements made that, the line will not close within limits; Over mountainous land; through scattering timber and dense undergrowth.
	Asc.
1.00	Top of spur, 10 ft. above cor., bears N.30°E. and S.30°W.
	Desc.
5.50	Bottom of swale, 40 ft. below spur, course E.
	Asc.
11.90	Top of ridge, 30 ft. above swale, bears NW and SE.
	Desc.
17.10	Bottom of swale, 85 ft. below ridge, course S.50°W.
	Asc.
23.90	Top of spur, 50 ft. above swale, bears N.60°E. and S.60°W.
	Desc.
27.50	Bottom of hollow, 70 ft. below spur, course W.
	Desc.
31.30	Top of ridge, 100 ft. above hollow, bears N.70°E. and S.70°W.
	Desc.
37.10	Bottom of swale, 50 ft. below ridge, course E.
	Asc.
40.00	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor.. mkd. on brass cap $\frac{1}{4}$ S 34 in W half; and S 35 in E half; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.
40.80	Top of spur, 40 ft. above swale, bears N. 70°W. and S.70°E.
	Desc.
45.90	Bottom of hollow, 80 ft. below spur, course E.
	Asc.
51.10	Top of spur, 50 ft. above hollow, bears N.80°W. and S.80°E.
	Desc.

Subdivision of T.33 S., R.8 W.-Continued.

Chains

63.65 Top of ledge, 90 ft. high, bears N.80°E. and S.80°W.

72.10 Top of ledge, 60 ft. high, bears N.50°E. and S.50°W.

77.39 Intersect S.bdy. of Tp., 2.18 chs. S.89°49'W., of the cor. of secs. 34 and 35, heretofore described.

Set an iron post, 3 ft. long, 2 ins. in dia., 12 ins. in the ground, on solid rock, and surrounded by mound of earth, and stone, for closing cor. of secs. 34 and 35, rivd. on brass cap

C C T 34 S R 8 W S 2 S 3 in S half.

T 33 S S 34 in NW.; and

R 8 W S 35 in NE. quadrants; and raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$ ft. high, N. of cor.

Note : I destroy all marks on the cor. of secs. 34 and 35 which pertain to secs. 34 and 35.

Land, very rough, steep, rocky, and mountainous.

Soil, clay and sandy about 1 ft. deep, on rocky subsoil.

Timber, cedar and pinon pine.

Undergrowth, sage and mahogany.

A very little grass.

Mountainous land, or land covered with dense undergrowth,

77.39 chs.

September 15, 1910.

September 14, 1910: At 6 h 56 m a.m., l.m.t., I set off 57° 56' N., on the lat.arc; 3° 39' E., on the decl.arc; and determine a meridian with the solar, at the cor. of secs.

13, 14, 23, and 24, heretofore described.

Thence I run

South, on a random line bet. secs. 23 and 24.

40.00 Set temp. & sec.cor.

80.00 Set temp.cor. of secs. 23, 24, 26, and 27.

Subdivision of T.33 S., R.8 W.-Continued.

Chains	
	Thence I run west, on a random line bet. secs. 23 and 26.
40.00	Set temp. $\frac{1}{4}$ sec. cor.
81.00	Intersect N. and S. line 21 lks. N. of the cor. of secs. 22, 25, 26, and 27 heretofore described.
	Thence I run N. 89° 51' E., on a true line bet. secs. 25 and 26.
	Over mountainous land, through scattering timber and dense undergrowth.
	Asc.
6.50	Top of ridge, 40 ft. above cor., bears N. and S.
	Desc.
11.20	Swale, 30 ft. below ridge, course S.
12.60	Spur, 30 ft. above swale, bears N. and S.
16.70	Hollow, 60 ft. below spur, course S. 20° W.
	Asc.
22.60	Ridge, 100 ft. above hollow, bears N. 30° E. and S. 30° W.
	Desc.
40.00	Set an iron post, 5 ft. long, 1 in. in dia., 17 ins. in the ground, on bed rock, and surrounded by mound of earth, and stone, for $\frac{1}{4}$ sec. cor.. mkd. on brass cap $\frac{1}{4}$ S 23' in N half and S 26' in S half; from which
	A pinon pine, 8 ins. dia., bears N 5° E., 31 lks. dist.. mkd. $\frac{1}{4}$ S 25 B T.
	A pinon pine, 12 ins. dia., bears S. 22° W., 27 lks. dist.. mkd. $\frac{1}{4}$ S 26 B T.
40.40	Bottom of hollow, 120 ft. below ridge, course S.
	Asc.
43.60	Ridge, 125 ft. above hollow, bears N. and S.
	Desc.
53.60	Bottom of hollow, 90 ft. below ridge, course S.
	Asc.
54.50	Top of spur, 30 ft. above hollow, bears N. and S.
	Desc.

Subdivision of T.33 S., R.8 W.-Continued.

Chains	
56.00	Wash, 30 lks. wide, 1 ft. deep, in bottom of swale, 30 ft. below spur, course S.30°W. Asc.
57.60	Top of spur, 30 ft. above swale, bears N.20°E. and S.20°W. Desc.
62.80	Begin abrupt descent, bears N. and S.
65.50	Bottom of swale, 60 ft. below spur, course S. Asc.
66.00	Begin abrupt ascent, bears N. and S.
69.50	Top of ridge, 100 ft. above swale, bears N. and S. Desc.
71.60	Swale, 40 ft. below ridge, course S. Asc.
73.70	Top of spur, 30 ft. above swale, bears N.30°E. and S.30°W. Desc.
77.90	Gulch, 60 ft. below spur, course S.35°W. Asc.
81.00	Intersect N. and S. line, at the temp. cor. of secs. 23, 24, 25, and 26. Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground, for cor. of secs. 23, 24, 25, and 26, mkd. on brass cap T 33 S S 23 in NW. R 8 W S 24 in NE. S 25 in SE.; and S 26 in SW quadrants; from which A pinon pine, 10 ins. dia., bears N.5°15'E., 57 lks. dist., mkd. T 33 S R 8 W S 24 B T. A pinon pine, 7 ins. dia., bears S.34°40'E., 11 lks. dist., mkd. T 33 S R 8 W S 25 B T. A pinon pine, 12 ins. dia., bears S.43°W., 16 lks. dist., mkd. T 33 S R 8 W S 26 B T. A pinon pine, 10 ins. dia., bears N.5°15', 37 lks. dist., mkd. T 33 S R 8 W S 23 B T. The entire mile is over broken ridges and hollows draining south in to Little Creek Canon. Soil, clay and sandy loam

Subdivision of T.33 S., R.8 W.-Continued.

Chains	8 to 10 ins. deep, subsoil, clay. Timber, cedar and pinon pine medium heavy. Undergrowth, sage brush. good grass. Mountainous or heavily timbered land, or land covered with dense undergrowth, 81.00 chs.
	September 14, 1910: At this ^{cor.} set off 3°33' N., on the decl. arc; and at 11 h ¹ 56 m a.m., i.m.t., I observe the sun on the meridian, the resulting lat. is 37°56' N., which is the proper lat. nearly.
	North, on a true line bet. secs. 23 and 24.
	Over mountainous land; through heavy timber and scattering undergrowth.
	Asc.
20.00	Top of ridge, 200 ft. above cor., bears E. and W.
	Desc.
25.00	Bottom of hollow, 50 ft. below ridge, course N.70°W.
	Asc.
30.00	Top of ridge, 75 ft. above hollow, bears N.60°W. and S.60°E. Leave heavy and enter scattering timber, bears N.60°W. and S.60°E.
	Desc.
40.00	Set an iron post, 3 ft. long, 1 in. in dia., 16 ins in the ground, to bed rock, and surrounded by mound of earth and stone, for $\frac{1}{4}$ sec. cor.. mkd. on brass cap $\frac{1}{4}$ S 25° in W half and S 24° in E half; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.
46.00	Bottom of canon, 200 ft. below ridge, course N.30°W.
	Asc.
51.00	Top of spur, 100 ft. above canon, bears E. and W.
	Desc.
53.00	Head of hollow, 50 ft. below spur, course W.
	Asc.
59.00	Top of spur, 57 ft. above hollow, bears E. and W.

Subdivision of T.33 S., R.8 W.-Continued.

Chains	
	Desc.
70.50	Head of hollow, 60 ft. below ridge, course W.
Asc.	
80.00	The cor. of secs. 15, 14, 23, and 24. S.20.00 chs.on south slope of ridge, gradual slope. Soil, clay loam, rich and medium texture. Schsoil, clay. Timber cedar and pinon pine. Undergrowth, sage brush. N.60.00 chs. is broken and rocky draining northwesterly, steep slopes. Soil, red clay and sand, from 3 ins. to 12 ins. deep. Timber cedar and pinon pine. Undergrowth, sage brush .Cone grass. Mountainous or heavily timbered land, 80.00 chs.

Note: Knowing from connections, already made that this line will not close on E. bdy. of Tp. within limits;

I run

East, on a true line, bet. secs. 13 and 24.

Over mountainous land; through scattering timber and dense undergrowth.

Asc.

5.00 Top of ridge, 40 ft. above cor., bears NW and SE.

Desc.

13.50 Bottom of hollow, 75 ft. below ridge, course N.10°W.

Enter heavy timber, bears N.10°W. and S.10°E.

Asc.

40.00 Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for $\frac{1}{2}$ sec.cor.. mld. on brass cap $\frac{1}{2}$ S 15' in N half and S 24' in S half; from which

A pinon pine, 10 ins. in dia., bears N.40°E., 50 lks. dist.. mld. $\frac{1}{2}$ S 15' B T.

A pinon pine, 13 ins. dia., bears S.33°W., 26 lks. dist.. mld. $\frac{1}{2}$ S 24' B T.

Subdivision of T.33 S., R.8. W.-Continued.

Chains	
46.50	Top of ridge, 500 ft above hollow, bears NE and SW. Desc.
53.00	Leave heavy and enter scattering timber, bears NE and SW. Enter dense undergrowth, bears NE and SW..
65.25	Bottom of hollow, 150 ft. below ridge, course N.20°W. Asc.
74.50	Top of spur, 100 ft. above hollow, bears NW and SE. Desc.
83.20	Intersect E.bdy.of Tp., 2.06 chs.North of cor.of secs. 13,18,19, and 24, heretofore described. Set an iron post, 5 ft.long, 2 ins.in dia., 24 ins.in the ground, for closing cor.of secs.13 and 24, mkl.on brass cap C C T 33 S R 27 W S 18 S 19 in E half. T 33 S in N half. R 8. W S 24 in SW.; and S 13 in NW.quadrants; and raise a mound of stone, 2 ft.base, 1½ ft.high, N of cor. Note:I destroy all marks on the cor.of secs.13,18,19, and 24 which pertain to secs.13 and 24. Land, mountainous, slopes gradual .3 %, Soil, clay and sandy loam, about 1 ft.deep, subsoil, clay and gravel. Timber, cedar and pinon pine. Undergrowth, sage brush, oak, service berry, mahogany, and buck brush. Good grass for grazing. Mountainous or heavily timbered land, or land covered with dense undergrowth, 83.20 chs.
	September 14, 1910.
	September 15, 1910: At 6 h 55 M.M., I set off

Subdivision of T.55 S., R.8 T.-Continued.

Chains	37°57' N., on the lat.arc; 5°16' N., on the decl.arc; and determine a meridian with the solar, at the cor.of secs. 11, 12, 13, and 14.
	Thence I run (Knowing that the line will not close in limits) East, on a true line bet,secs.12 and 13.
	Over mountainous land; through heavy timber and scattering undergrowth.
	Asc.
14.00	Top of spur,100 ft.abve cor.,bears N.and S.
	Desc.
16.50	Bottom of gulch,60 ft. below spur, course S.
	Asc.
20.00	Top of ridge,100 ft.above gulch,bears N.20°W.and S.20°E.
	Desc.
34.00	Swale,50 ft.below spur, course S.40°E.
	Asc.
39.00	Top of ridge,60 ft.above swale,bears N.and S.
	Desc.
40.00	Set an iron post,3 ft.long ,1 in.in dia.,16 ins.in the ground, and surrounded by mound of earth and stone, for 1 sec.cor.rkd.on brass cap $\frac{1}{2}$ S 12' in N half and S 13' in S half; from which
	A pinon pine,10 ins.dia.,bears N.40°E.,33 lks. dist..mkd. $\frac{1}{2}$ S 12 B T.
	A pinon pine,8 ins.dia.,bears S.30°W.,26 lks. dist..mkd. $\frac{1}{2}$ S 13 B T.
45.00	Desc.abruptly over s andstone,ledges, bears N.and S.
63.00	Bottom of hollow,250 ft.below spur, course N.10°W.
	Asc.abruptly .
67.10	Spur,100 ft.above hollow,bears N.and S.
	Desc.abruptly.
73.75	Wash,60 lks.wide,4 ft.deep,in bottom of canon,150 ft. below spur, course N.65°W.
	Asc.abruptly over low sandstone ledges.

Subdivision of T.33 S., R.8 W.-Continued.

Chains	
83.27	<p>Intersect E.bdy.of Tp., 3.87 chs. North of the cor.of secs. 7,12,13, and 18, heretofore described.</p> <p>Set an iron post, 3 ft.long, 2 ins.in dia., 24 ins.in the ground, for closing cor.of secs.12 and 13, mkl.on brass cap</p> <p>T.33 S in N.half.</p> <p>C C R 7 W S 7 S 18 in E.half.</p> <p>R 8 W S 13 in SW.and</p> <p>S 12 in NW.quadrants;and raise a mound of stone, 2 ft.base, $1\frac{1}{2}$ ft.high;W.of cor.</p> <p>Note;I destroy all marks on the cor.of secs:7,18,13, and 18 which pertain to secs.12 and 13.</p> <p>Land,rough and mountainous ,steep slopes and rocky .</p> <p>Soil,rich sandy loam,about 18 ins.deep,well mixed with small and large sandstone rocks:Subsoil sandstone.</p> <p>Timber,cedar and pinon pine.</p> <p>Undergrowth,sage brush.</p> <p>Good grass for grazing.</p> <p>Mountainous or heavily timbered land,or land covered with dense undergrowth,83.27 chs.</p> <p>September 15,1910:At this cor.I set off 3°10'N.,on the decl.arc;and at 11 h 55'M.,A.M.,l.m.t.;I observe the sun on the meridian the resulting lat.is 37°57'N.,which is the proper lat.nearly.</p> <hr/> <p>From the cor.of secs.23,24,25, and 26.</p> <p>I run</p> <p>East, on a true line bet.secs.24 and 25. Reasons already explained..</p> <p>Over mountainous land;through heavy timber and scattering undergrowth.</p> <p>Asc. :</p> <p>33.00 Top of ridge,150 ft.above cor.,bears N.40°W.and S.40°E.</p>

Subdivision of T.35 S., R.8 W.-Continued.

Chains	
	Desc.
38.50	Bottom of hollow, 75 ft. below ridge, course S.30°E.
	Asc.
39.50	Wood road, bears N. and S.
40.00	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for 1/4 sec.cor..rnd.on brass cap 1/4 S 24 in N half and S 25 in S half; and raise a mound of stone, 2 ft. base, 1 1/2 ft. high, N. of cor.
51.00	Top of ridge, 100 ft. above hollow, bears N. and S.
	Desc.abruptly over volcanic ledges.
57.00	Bottom of hollow, 300 ft. below ridge, course S.15°W.
	Asc.abruptly over ledges.
79.00	Top of ridge, 500 ft. above hollow, bears N.10°E. and S.10°W.
	Leave ledges, bear. N.10°E. and S.10°W.
	Desc.
86.10	Intersect E.bdy.of Tr., 1.98 chs.N. of the cor.of secs. 19, 24, 25, and 30, heretofore described.
	Set an iron post, 3 ft. long, 2 ins.in dia., 24 ins.in the ground, for closing cor.of secs.24 and 25, rnd.on brass cap 1/4 S 33 S in N. half.
	C C R 7 W 1 19 S 30, in E half.
	E 8 W C 25 in SW.; and
	S 24 in NW quadrants; from which
	A pinon pine, 20 ins.dia., bears S.30°W., 66 lbs. dist..rnd.T 33 S R 8 W S 25 B T.
	A pinon pine, 15 ins.dia., bears N.67°W., 60 lbs. dist..rnd.T 33 S R 8 " S 24 B T.
	Note:I destroy all marks on the cor.of secs.19, 24, 25, and 30, which pertain to secs.24 and 25.
W.51.00	chs.somewhat rolling ridges and hollows, sloping southward. Soil, sandy loam, about 2 ft. deep, rich and producing considerable grass besides heavy timber and sage and buck brush. Balance of mle very steep and rugged

Subdivision of T. 35 S., R. 8 E.W. -Continued.

Chains	and covered with volcanic rocks and ledges. Soil, loam well mixed with rock. Timber, cedar and pinon pine. Under growth, sage, buck, and oak brush.
	mountainous or heavily timbered land, or land covered with dense undergrowth, 83.10 chs.

September 15, 1910.

Instrumentman G.L.O.

General Description.

This township is rough and mountainous; it lies east of Parowan valley. The ridges mostly run East and west and the hollows drain westerly into the valley. The formation is sedimentary with the exception of a volcanic overflow in and around secs. 24 and 25. The sedimentary formation is practically horizontal and had been little disturbed excepting near the volcanic intrusion. The sedimentary formation is mostly sandstone, but there are a few beds of limestone and shale outcropping in the canons. There is a small amount of land along the foot hills and in the edge of Parowan valley that will be suitable for dry farming. The balance of the township is almost too rough for sheep grazing. There is an abundance of cedar and pinon pine timber in the township but it is only good for fuel.

Little Creek and Red Creek run through the township from east to west and furnish sufficient water for grazing purposes. The water from these creeks is used for irrigation in and around Paragonah town.

In secs. 24 and 25 there is a good showing of iron ore occurring as stringers of hematite and magnetite in the volcanic rock. Considerable prospecting and some development work has been done in the township immediately east of this township. I therefore recommend that secs. 24 and

Subdivision of T.33 S., R.8 W.-Continued.

Chains 25 be returned as mineral land.

There are no settlers in the township.

*John R Stewart
Dinby Stewart
Instrumentmen G.L.O.*

Volume

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Page

FINAL OATHS OF DEPUTY SURVEYOR AND HIS ASSISTANTS.**LIST OF NAMES.**

A list of the names of the individuals employed by John R. Stewart
 United States ~~Deputy Surveyor~~ Transitman, to assist in running, measuring, and
 king the lines and corners described in the foregoing field notes of the survey of the subdivi-
 onal lines of Township 33 South, Range 8 West of the S.L.B.& M.,
 an,
 ing the respective capacities in which they acted:

....., Chainman.

....., Chainman.

....., Moundman.

....., Moundman.

....., Axman.

....., Axman.

Maeser Dalley Flagman.

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted John R. Stewart
 United States ~~Deputy Surveyor~~ Transitman, in surveying all
 se parts or portions of the subdivision of Township 33 South, Range 8 West of
 lie.

..... of the Salt Lake

base and meridian, State of Utah which are represented
 the foregoing field notes as having been surveyed by him and under his direction; and that said survey
 been in all respects, to the best of my knowledge and belief, well and faithfully surveyed, and the
 mer monuments established, according to the instructions furnished by the United States Surveyor
 general for Utah.

....., Chainman.

....., Chainman.

....., Moundman.

....., Moundman.

....., Axman.

....., Axman.

....., Axman.

Flagman.

Maeser Dalley

scribed and sworn to before me this 15
 day of September 19 10 }

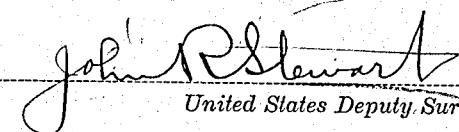


John R. Stewart
U.S. Transitman

FINAL OATH OF UNITED STATES DEPUTY SURVEYOR.

I, _____, United States Deputy Surveyor _____, solemnly swear that, in pursuance of a contract received from _____, United States Surveyor General for _____, bearing date of _____ day of _____, 19_____, I have well, faithfully, and truly, in my proper person, and in strict conformity with the instructions furnished by the United States Surveyor General for _____, the Manual of Surveying Instructions, and the laws of the United States, surveyed all those parts or portions of _____.

_____ of the _____ meridian, in the _____, which are represented in foregoing field notes as having been surveyed by me, and under my direction; and I do further solemnly swear that all the corners of said survey have been established and perpetuated in strict accordance with the Manual of Surveying Instructions, and the special written instructions of the United States Surveyor General for _____ and in the specific manner described in the field notes, and that the foregoing are the original field notes of such survey.



John R. Stewart
United States Deputy Surveyor

Subscribed by said _____, and sworn to before me }
this _____ day of _____, 19_____ }



APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

The foregoing field notes of the survey of _____

executed by _____
under his contract No. _____, dated _____, 19_____, having been critically examined, and the necessary corrections and explanations made, the said field notes, and the surveys they describe, are hereby approved.

United States Surveyor General

I certify that the foregoing transcript of the field notes of the above-described surveys in _____, has been correctly copied from the original notes on file in this office.

United States Surveyor General

FINAL OATHS OF DEPUTY SURVEYOR AND HIS ASSISTANTS.

LIST OF NAMES.

A list of the names of the individuals employed by _____,

United States Deputy Surveyor, to assist in running, measuring, and marking the lines and corners described in the foregoing field notes of the survey of _____,

showing the respective capacities in which they acted:

_____, Chainman.

For lists of names and final oaths of assistants see book "J" _____, Chainman.

T. 32 S., R. 6 W. _____, Moundman.

Final oath of Jaeser Dalley, flagman, this book. _____, Moundman.

_____, Axman.

_____, Axman.

_____, Flagman.

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted _____,

United States Deputy Surveyor, in surveying all those parts or portions of the _____,

of the _____,

meridian, _____, of _____, which are represented in the foregoing field notes as having been surveyed by him and under his direction; and that said survey has been in all respects, to the best of our knowledge and belief, well and faithfully surveyed, and the corner monuments established, according to the instructions furnished by the United States Surveyor General for _____,

_____, Chainman.

_____, Chainman.

_____, Moundman.

_____, Moundman.

_____, Axman.

_____, Axman.

_____, Flagman.

Subscribed and sworn to before me this _____
day of _____, 190_____



FINAL OATH OF UNITED STATES DEPUTY SURVEYOR.

I, _____, United States Deputy Surveyor, do solemnly swear that, in pursuance of a contract received from _____, United States Surveyor General for _____, bearing date of the _____ day of _____, 190_____, I have well, faithfully, and truly, in my own proper person, and in strict conformity with the instructions furnished by the United States Surveyor General for _____, the Manual of Surveying Instructions, and the laws of the United States, surveyed all those parts or portions of _____.

For final oaths of transitmen see book "Z12" T.31 S. E9W.

of the _____
meridian, in the _____ of _____, which are represented in the foregoing field notes as having been surveyed by me, and under my direction; and I do further solemnly swear that all the corners of said survey have been established and perpetuated in strict accordance with the Manual of Surveying Instructions, and the special written instructions of the United States Surveyor General for _____ and in the specific manner described in the field notes, and that the foregoing are the original field notes of such survey.

United States Deputy Surveyor

Subscribed by said _____, and sworn to before me }
this _____ day of _____, 190 }



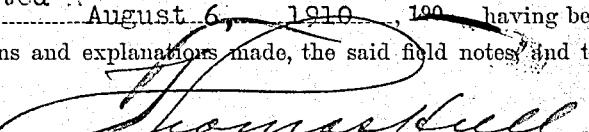
APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Salt Lake City, Utah, January 7, 1914., xx

The foregoing field notes of the survey of the subdivisional lines of Township No. 33 South, Range No. 8 West of the Salt Lake Base and Meridian, Utah,

executed by John R. Stewart and Quinby Stewart
under their special instructions dated _____, August 6, 1910, 190_____, having been critically examined, and the necessary corrections and explanations made, the said field notes and surveys they describe, are hereby approved.


George M. Bell
United States Surveyor General

I certify that the foregoing transcript of the field notes of the above-described surveys in _____, has been correctly copied from the original notes on file in this office.

United States Surveyor General

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4-679.

FILED

BOOK A-384

FEB 17 1911

E.

FIELD NOTES

X.3.8.

OF THE SURVEY OF THE

EAST BOUNDARY

and

RETRACEMENT NORTH SOUTH AND EAST BOUNDARIES

of

Township No. 33 South, Range No. 7 West,

Of the Salt Lake Base and Meridian,
 State of Utah.

AS SURVEYED BY

John R. Stewart and Quinby Stewart U.S. Transitmen, I.C.,
 United States Deputy Surveyor,

Assignment Group No. 1
 Under his Contract No. 1000, dated August 6, 1910.

Survey commenced September 11, 1910. 1000

Survey completed September 26, 1910. 1000

6-161

Retro E Bay 21-18-83
 E Bay 79-70 Retro E Bay 41-13
 Retro W 8 6-08-67

NAMES AND DUTIES OF ASSISTANTS.

Frank S. Allen, Chainman.

R. Bert Carter, Chainman.

Ruban W. Riley, Moundman.

Isaac E. Hayes, Axman.

Verne O. Nelson, Chainman.

Alton Ivie, Chainman

Harvey W. Elliott, Moundman.

Nicholas L. Sheffield, Axman.

Milo Nelson, Flagman.

William Carter, Flagman. Preliminary oath this book.

For preliminary affidavits see book "C" T. 33 S., R. 8 W.

BOOK A-384.

INDEX DIAGRAM.

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2	3				

Meanders Page.....

PRELIMINARY OATHS OF ASSISTANTS.

WE

and

do solemnly swear that we will well and faithfully execute the duties of chainmen; that we will level a chain upon even and uneven ground, and plumb the tally pins, either by sticking or dropping the same; that we will report the true distances to all notable objects, and the true lengths of all lines that we assist in measuring, to the best of our skill and ability, and in accordance with instructions given us, in the survey.

Chaining

, Chania



WE

...and

do solemnly swear that we will well and truly perform the duties of moundmen in the establishment of corners, according to the instructions given us; to the best of our skill and ability, in the survey

Mowndy

Alouatta

Subscribed and sworn to before me this _____
day of _____, 190_____



We

and

do solemnly swear that we will well and truly perform the duties of axmen in the establishment of
and other duties, according to instructions given us, to the best of our skill and ability, in the surve

• 10

卷之三

Subscribed and sworn to before me this
day of 190



I, William Carter, do solemnly swear that I will well and truly perform the duties of flagman according to instructions given me, to the best of my skill and ability, in survey of E. bay and Retracement E. and N. bars T. 33 S., R. 7 W.; and Retracement E. and W. bars T. 32 S., R. 7 W.

Subscribed and sworn to before me this 11
day of September, 1810. ~~XXXX~~



John P. Stewart

U.S. Twentieth Century

Retracement of S. bdy. T. 33 S., R. 7 W.

Chains

Survey commenced Sept. 11, 1910 and executed with a W. and L.E. Gurley Explorer's transit, with solar attachment.

The horizontal limb is provided with two double verniers placed opposite to each other, reading to single minutes of arc; which is also the least count of the verniers of the latitude and declination arcs.

The instrument was examined, tested on the meridian at Salt Lake City, found correct, and was approved by the surveyor general for Utah on August 6, 1910.

I examine the adjustments of the instrument and correct the level and collimation errors; then, to test the solar apparatus by comparing its indications resulting from solar observations made during p.m. and a.m. hours with a meridian established by Polaris observation, I proceed as follows:

At the closing cor. of Tps. 33 and 34 S., R. 7 W., heretofore described, latitude $37^{\circ}53'51''$ N., longitude $112^{\circ}39'47''$ W., I set off $37^{\circ}54'$ N. on the lat. arc; $4^{\circ}38'$ N. on the decl. arc; and at 3h 57m p.m.l.m.t., I determine a meridian with the solar, and mark a point thereof on a stone firmly set in the ground, 5.00 chs. N. of the cor.

At 8h 12m p.m.l.m.t., I observe Polaris at eastern elongation, in accordance with the Manual, and mark a point in the line thus determined, by a tack driven in a wooden plug set in the ground 5.00 chs. N. of the cor.

September 11, 1910.

September 12, 1910: At 6h 40m a.m.l.m.t., I lay off the azimuth of polaris $1^{\circ}29'4''$ to the west and mark a point in the meridian thus determined by cutting a small groove in the stone already set 5.00 chs. N. of the cor. this mark falls 0.31 ins. east of the meridian determined by the solar.

Retracement South. Bdy. T. 35 S., R. 7 W. Continued.

Chains

At 6 h 57 m a.m., l.m.t., I set off $37^{\circ}54'N.$ on the lat. arc; $4^{\circ}25'N.$ on the decl. arc; and mark the meridian determined with the solar, by a cross on the stone already set 5.00 chs. N. of the cor.; this mark falls 0.4 ins. east of mark determined by Polaris observation. The solar apparatus by p.m. and a.m. observations defines positions for meridians respectively about $0'16''$ west and $0'21''$ east of the meridian established by Polaris observations.

The magnetic bearing of the meridian at 7 h 30m a.m., is $N.15^{\circ}52'W.$, the angle thus determined gives the mag. decl. $15^{\circ}52'E.$

From the closing cor. of Tps. 33 and 34 S., Rs. 7 W., which has been changed by me to be the northwest cor. of T. 34 S., R. 7 W., only

I run

East, on a retracement line bet. secs. 6 and 31.

- 13.25 Fall 1 lk. N. of the closing cor. of Tps. 33 S., Rs. 7 and 8 W., heretofore described.
- 58.25 Fall 5 lks. N. of the $\frac{1}{2}$ sec. cor. bet. secs. 6 and 31, which is a sandstone, 10x8x6 ins. above ground, firmly set, and mkd. and witnessed as described by the surveyor general.
- 96.31 Fall 9 lks. N. of the cor. of secs. 5, 6, 31, and 32, which is a volcanic stone, 10x10x5 ins. above ground, firmly set and mkd. and witnessed as described by the surveyor general.

The course of this line is therefore $S.89^{\circ}57'E.$ 89.3lchs.

Note: No change in topography from original notes.

September 12, 1910: At this cor. I set off $4^{\circ}19'N.$ on the decl. arc; and at 11h 56m a.m.l.m.t., I observe the sun on the meridian, the resulting lat. is $37^{\circ}54'N.$, which is the proper lat. nearly.

Retracement South bdy:T.33 S., R.7 W.-Continued.

Chains

- S.89°22'E., on a retracement line bet.secs.5 and 32.
- 40.15 Intersect the $\frac{1}{2}$ sec.cor.bet.secs.5 and 32, which is a volcanic stone, 10x14x4 ins., above ground, firmly set, and mkd. and witnessed as described by the surveyor general. Thence I run
- N.89°52'E., on retracement line bet.east halves of secs. 5 and 32.
- At 40.37 chs., making mile
- 90.52 Fall 56 alk. N. of the cor.of secs.4,5,32, and 33, which is a volcanic stone, 10x8x6 ins., above ground, firmly set, and mkd. and witnessed as described by the surveyor general. The course of the west half mile is therefore S.89°22'E. 40.15 chs. and the east half mile is S.89°20'E., 40.37 chs.
- No change in topography from original notes.

September 12, 1910.

Survey of E.bdy.T.33 S., R.7 W.

September 21, 1910: At 9 h 53 m a.m., l.m.t., I set off 57° 55' N., on the lat.arc; 0°53' N., on the decl.arc; and determine a meridian with the solar, at the cor.of secs.25,30, 31, and 36, on E.bdy.of Tp., heretofore described. Thence I run

South, on random line bet.secs.31 and 36.

40.00 Set temp. $\frac{1}{2}$ sec.cor.

79.70 Intersect S.bdy.of Tp.4.14 chs.west of the $\frac{1}{2}$ sec.cor.,

E.bdy.T.33 S.,R.7 W. Continued.

Chains

on N.bdy.sec.1,T.34 S.,R.7 W.,which is a red sandstone.
12x12x5 ins.above ground,firaly set.and mkd.and witness
as described by the surveyor general.

Set an iron post,3 ft.long,3 ins.in dia.,24 ins.in the
ground,for closing cor.of Tps.33 S.,R.6 and 7 W.,mkd.
on brass cap

C C T 33 S in N half.

T 7 34 S R 7 nW S 1 in S half.

R 7 W S 36 in NW.;and

R 6 W S 31 in NE.quadrants;from which

An aspen,8 ins.dia.,bears N.61°E.,13 lks.

dist..mkd.T 33 S R 6 " S 31 B T.

A white pine,22 ins.in dia..Bears N.45°W.,119
lks.dist..mkd.T 33 S R 7 W S 36 B T.

Thence I run

North, on true line betsecs.31 and 36.

Over mountainous land;through heavy pine and aspen
timber.

Desc.

3.40 Creek,2 lks.wide,1 in.deep,in canon,40 ft.below cor.,
course SE.

Asc.

5.00 Leave pine and aspen timber and enter dense mahogany
undergrowth,bears IW and SE.

39.50 Top of ridge,500 ft.above canon,bears E.and W.

Leave dense and enter scattering undergrowth,bears E.and
W.

Enter heavy cedar and pinon pine timber.bears E.and W.

Desc.

39.85 Set an iron post,3 ft.long,1 in.in dia.,26 ins.in the
ground,for 2 sec.cor..mkd.on brass cap S 36 in W half
and S 31 in E half;from which

A mahogany,10 ins.dia.,bears N.82°E.,28 lks.

dist..mkd. S 31 B T.

A mahogany 11.ins.in dia..bears N.63°W.18 lks.

E.bdy.T.33 S., R.7 W.-Continued.

Chains

dist.. mld. 1 S. 36 B. T.

45.00 Leave heavy and enter scattering timber, bears NE and SW.
Enter dense mahogany and oak brush, bears NE and SW.

46.00 Bottom of hollow, 150 ft. below ridge, course N.25°E.
Asc.

60.00 Top of ridge, 150 ft. above hollow, bears E. and W.
Desc.

70.00 Leave mahogany undergrowth and timber, bears E. and W.

79.70 The cor. of secs. 25, 30, 31, and 36.

Land, mountainous long slopes tops of ridges rolling.

Soil, rich black loam about 18 ins. deep, subsoil, clay.

Timber, cedar, pinon pine and pine and aspen.

Undergrowth, mahogany and oak brush.

Good grass for grazing.

Mountainous or heavily timbered land, or land covered with dense undergrowth, 79.70 chs.

September 21, 1910: At this cor. I set off 0°50' N., on the decl. arc; and at 1 h 53 m. a.m., l.m.t., I observe the sun on the meridian, the resulting lat. is 37°55' N., which is the proper lat. nearly.

September 21, 1910.

September 22, 1910: At 1 h 53 m p.m., l.m.t., I set off 37°57' N., on the lat. arc; 0°25' N., on the decl. arc; and determine a meridian with the solar at the cor. of secs. 7, 12, 13, and 18. heretofore described.

I run

South, on a retracement line bet. secs. 13 and 18.

41.13 Fall 80 lbs. W. of 1 sec.cor. bet. secs. 13 and 18, which is a sandstone, 8x10x4 ins., above ground, firmly set, and mld. and witnessed as described by the surveyor general.

41.13 The course of this line is therefore S.1°07'E. 41.13 chs.

Retracement E.bdy.of T.35 S., R.7 W. (Continued.)

Chains

No change in topography from original notes.

September 22, 1910.

Retracement of N.bdy.T.35 S., R.7 W.

September 24, 1910: At 7^h 52m a.m., l.m.t., I set off 57°59' N., on the lat.arc; 0°15' S., on the decl.arc; and determine a meridian with the solar, at the cor.of secs. 2, 3, 34, and 35, on N.bdy.of Tps., which is a conglomerate stone, 8x18x12 ins. above ground, firmly set, and mkd. and witnessed as described by the surveyor general. The stone is partly decayed; therefore I destroy the old cor. and re-establish it at the same place as follows:

Set an iron post, 5 ft. long, 3 ins. in dia., 14 ins. in the ground, on bed rock, and surrounded by mound of stone, and earth for cor.of secs. 2, 3, 34, and 35, mkd.on brass cap
T 32 S S 34 in NW.

R 7 W S 35 in NE.

R 7 W S 2 in SE.; and

T 33 S S 3 in SW. quadrants; and raise a mound of stone, 2 ft. base, 1½ ft. high, W.of cor.

Thence I run

East, on a retracement line bet.secs. 2 and 35.

Over mountainous land; through heavy timber and dense undergrowth.

Asc.

2.22 Top of ridge, 100 ft. above cor., bears N.20°E. and S.20°W.

Desc.

9.00 Leave timber, bears N. and S.

14.00 Bottom of hollow, 300 ft. below ridge, course S.

Retracement N.bdy.T.35 S., R.7 W.-Continued.

Chains	
	Asc.
41.50	Fall 118 lks. S. of the 4 sec.cor. bet. secs. 2 and 35, which is an iron stone, 7x12x6 ins., above ground, firmly set and mkd. and witnessed as described by the surveyor general; I destroy the old cor. and re-establish it in the same place as follows: Set an iron post, 3 ft. long, 1 in. in dia., 20 ins. in the ground, on bed rock, and surrounded by mound of earth and stone, for $\frac{1}{2}$ sec.cor.. mkd. on brass cap T S 35 in NW half and S 2 in S half; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, N. of cor. ✓
43.75	Top of ridge, 400 ft. above hollow, bears N.50°W. and S.50° E.
	Desc.
50.50	Head of hollow, 50 ft. below ridge, course N.50°W.
	Asc.
64.00	Top of ridge, 100 ft. above hollow, bears N. and S.
	Desc.
82.99	Fall 237 lks. S. of the cor. of secs. 1, 2, 35, and 36, which is a gray granite stone, 10x13x6 ins. above ground, firmly set and mkd. and witnessed as described by the surveyor general, I destroy the old cor. and re-establish it in the same place as follows: Set an iron post, 3 ft. long, 3 ins. in dia., 18 ins. in the ground, on bed rock, and surrounded by mound of earth and stone, for cor. of secs. 1, 2, 35, and 36, mkd. on brass cap T 32 S S 35 in NW. R 7 W S 36 in NE. R 7 W S 1 in SE.; and T 33 S S 2 in SW. quadrants; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. ✓ The course of this line is therefore N.88°22'E., 83.02 chs. Land, high mountains with long slopes somewhat gradual. Soil, black loam about 12 ins. deep, mixed with volcanic

retracement N.bdy.T.33 S., R.7 W.-Continued.

Chains	<p>gravel and rocks .subsoil is rock and clay .</p> <p>Timber, cedar and pinon pine.</p> <p>Undergrowth, oak, sage brush , and buck brush.</p> <p>Good grass for grazing.</p> <p>Mountainous or heavily timbered land,or land covered with dense undergrowth, 85.02 chs.</p> <p>September 24, 1910:At the noon hour the sky is overcast and solar observations are impossible.</p> <hr/> <p>East, on a retrace ment line bet. secs.1 and 36.</p> <p>Over mountainous land; through dense sage and oak brush.</p> <p>Desc.</p>
.25	Bottom of hollow,10 ft. below cor.,course S.10°E. Asc.
5.00	Top of spur,150 ft.above hollow,bears N.20°E.and S.20°W. Desc.
8.00	Bottom of hollow,50 ft.below spur,course S.20°W. Leave mahogany and sage brush and enter dense oak brush, bears N.20°E.and S.20°W. Asc.
20.00	Leave oak brush and enter dense sage brush,bears NE and SW.
32.00	Top of ridge,300 ft.above hollow,bears NE and SW. Desc.
36.00	Leave sage brush and enter dense oak brush, bears NE and SW.
37.00	Head of hollow,40 ft.below ridge,course SW. Asc. over small ledges.
40.50	Fall 50 lbs.N:of the 1/4 sec.cor.,bet.secs.1 and 36,which is a gray granite stone,8x12x8 ins.,above ground,loosely set and rkd.and witnessed as described by the surveyor general.I destroy the old cor.and re-establish it in the

Retracement N. Bdy. T. 33 S., R. 7 W. Continued.

Chains	
	same place as follows:
Set an iron post 3 ft. long, 1 in. in dia., 26 ins. in the ground for $\frac{1}{4}$ sec.cor., mkd. on brass cap $\frac{1}{2}$ S 36 in N half and S 1 in S. half; and raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high N. of cor.	
44.50	Top of ridge, 300 ft. above hollow, bears N. and S.
Desc.	
50.00	Head of hollow, 150 ft. below ridge, course S. Asc.
56.00	Enter heavy pine and aspen timber, bears N. and S.
64.00	Top of ridge, 150 ft. above hollow, bears NE. and SW.
Desc. abruptly.	
65.00	Leave pine and aspen timber and enter dense mahogany undergrowth, bears NE. and SW.
71.30	Hollow, course S.
74.50	Ridge, bears N. and S.
79.61	Fall 208 lks. North of the cor. of Tps. 32 and 33 S., Rs. 6 and 7 W., which is a gray granite stone, 16x12x5 ins. above ground, firmly set and mkd. and witnessed as de- scribed by the surveyor general.
	The course of the west half of this mile is therefore S.89°17'E., 40.50 chs.; the east half is S.87°41'E. 39.15 chs.
	Land, high and steep ridges.
	Soil, clay loam mixed with gravel and rock, from 5 to 10 ins. deep, subsoil, mostly rock.
	Timber, cedar, pinon pine, red and white pine and aspen.
	Undergrowth, sage, oak, buck and mahogany brush.
	Good grass for grazing.
	Mountainous or heavily timbered land, or land covered with dense undergrowth, 79.65 chs.
	September 24, 1910.
	<i>John D. Stewart</i> Instrumentman G.L.O.

Retracement N. bdy. T. 33 S., R. 7 W. Continued.

Chains

Survey commenced September 26, 1910, and executed with a Young and Sons Light mountain transit No. 7382, with solar attachment. The horizontal limb is provided with two double verniers placed opposite to each other, reading to single minutes of arc; which is also the least count of the latitude and declination arcs.

The instrument was examined, tested on the meridian at Salt Lake City, found correct, and was approved by the surveyor general for Utah, on August 6, 1910.

Note: For complete test of instrument see notes of Sub.

T 33 S., R. 7 W.

At the cor. of secs. 2, 3, 34 and 35 on N. bdy. of Tp., latitude $37^{\circ}59'04''$ N., longitude $112^{\circ}35'19''$ W., I set off $37^{\circ}59'N.$ on the lat. arc; $1^{\circ}02'S.$ on the decl. arc; and at 7h 52m a.m.l.m.t., I determine a meridian with the solar.

From the cor. of secs. 2, 3, 34 and 35, heretofore described, I run West

On a retrace line bet. secs. 3 and 34.

Over mountainous land; through dense mahogany and oak brush and scattering cedar and pinon pine timber.

Desc. abruptly into Cottonwood canon.

5.00 Begin more precipitous descent over conglomerate ledges, bears N. and S.

12.44 Creek 4 lks. wide, 6 ins. deep, in bottom of Cottonwood canon, 800 ft. below cor., course N. 20° W.
Asc. abruptly over conglomerate ledges.

29.60 Top of ridge, 600 ft. above canon, bears N. and S.

Desc. over a series of low ledges.

38.13 Fall 19 lks. N. of the $\frac{1}{4}$ sec. cor. bet. secs. 3 and 34, which is a granite boulder 6x4x3 ft. above ground, mkd. and witnessed as described by the surveyor general.

47.00 Top of conglomerate ledge, 100 ft. high, bears NE. and SW.

53.00 Leave ledges, bears NW. and SE.

73.40 Bottom of hollow, 800 ft. below ridge, course N. 30° W.

Asc.

Retracement N.W.D.Y.T.33 S., R. 7 W. - Continued.

Chains

80.47 Fall 37 lms. N.of the cor.of secs.3,4,33, and 34, which is a conglomerate stone, 8x16x10 ins., above ground, firmly set, and mkd.and witnessed as described by the surveyor general.

I destroy the old cor.stone and re-establish it in the same place as follows:

Set an iron post, 3 ft. long, 3 ins. in dia., 24 ins. in the ground, for cor.of secs.3,4,33, and 34, mkd.on brass cap

T 32 S S 33 in NW.

R 7 W S 34 in NE.

R 7 W S 3 in SE.; and

T 33 S S 4 in SW.quadrants; The old bearing trees are correctly described in the old notes ; therefore I leave them as they are and raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$ ft. high, W.of cor.

The course of this mile is therefore S.89°44'W., 80.47 chs.

Land, mountainous, slopes high and steep, from 5.00 chs. to 53.00 chs. point is a series of conglomerate ledges from 5 ft. to 100 ft. high.

Soil, rich black loam, but from the 5.00 ch. to the 53.00 ch. point there is very little soil on the rocks.

Timber, scattering cedar and pinon pine.

Undergrowth, dense mahogany and oak brush and some sage brush.

A very little grass.

Mountainous land, or land covered with dense undergrowth, 80.47 chs.

West, on retracement line betsecs.4 and 33.

Over mountainous land; through scattering timber and dense undergrowth.

Asc.

Retracement N.bdy.T.33 S., R.7 W.-Continued.

Chains	
6.10	Top of spur, 100 ft. above cor., bears N. and S. Desc.
11.00	Bottom of hollow, 75 ft. below spur, course N. Asc.
17.25	Top of ridge, 100 ft. above hollow, bears N. and S.
27.00	Bottom of hollow, 100 ft. below ridge, course N.30°E. Leave dense and enter scattering undergrowth, bears N.30°E. and S.30°W. Enter heavy cedar and pinon pine timber, bears N.30°E. and S.30°W.
	Asc.
38.64	Fall 135 lms. S of the $\frac{1}{4}$ sec.cor. bet. secs. 4 and 33, which is an iron stone, 6x12x12 ins. above ground, firmly set, and mkd. and witnessed as described by the surveyor general. I destroy the old cor. and re-establish it in the same place as follows: Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for $\frac{1}{4}$ sec.cor.. mkd. on brass cap $\frac{1}{2}$ S 33 in N half and S 4 in S half; the old bearing trees are in tact and properly described therefore I leave them as they are.
43.75	Leave timber and enter dense sage and oak brush, bears N. and S.
46.00	Top of ridge, 500 ft. above hollow, bears NE and SW. Desc.
60.00	Head of hollow, 100 ft. below ridge, course N. Asc.
65.70	Top of spur, 100 ft. above hollow, bears N. and S. Enter scattering timber, bears N. and S. Desc.
73.50	Bottom of hollow, 75 ft. below spur, course N.10°W. Asc.
78.21	Top of ridge, 150 ft. above hollow, bears N. and S. Fall 135 lms. S. of the cor. of secs. 4, 5, 32, and 33, which is a granite stone, 7x14x9 ins., above ground, firmly set, and

Refracement N.Wdy.T.33 S., R.7 W.-Continued.

Chains

mkd.and witnessed as described by the surveyor general.
I destroy the old cor.and re-establish it in the same place as follows:

Set an iron post,3 ft.long,3 ins.in dia.,20 ins.in the ground,embed rock, and surrounded by mound of earth and stone,for cor.of secs.4,5,32, and 33,mkd.on brass cap

T 32 S S 32 in NW.

R 7 W S 33 in NE.

R 7 W S 4 in SE.;and

T 33 S S 5 in SW.quadrants;from which

A cedar,12 ins.dia.,bears N.48°E.,16 lks.

dist..mkd.T 32 S R 7 W S 33 B T.

A cedar,20 ins.dia.,bears S.18°E.,50 lks.

dist..mkd.T 33 S R 7 W S 4 B T.

A pinon pine,20 ins.dia.,bears S.5°45'W.,70 lks.

dist..mkd.T 33 S R 7 W S 5 B T.

A pinon pine,10 ins.dia.,bears N.50°W.,38 lks.

dist..mkd.T 32 S R 7 W S 32 B T.✓

The course of the east half of this mile is therefore N.88°00'W.,38.66 chs.and the west half is S.89°58'W.,39.57 chs.

Land,mountainous,sloping and draining northward into Cottonwood Canon.The ridges are rounding and slopes are gradual.

Soil,rich clay loam from 12 to 18 ins.deep,subsoil clay and gravel.

Timber,cedar and pinon pine.

Undergrowth,oak,mahogany and sage brush.

Good grass for grazing.

Mountainous or heavily timbered land,or land covered with dense undergrowth,78.23 chs.

September 26,1910 :At this cor.I set off 1°06'S.,on the decl.arc;and at 11 h 52 m a.m.,1 m.t.,I observe the sun on the meridian,the resulting lat.is 37°59'N.,which is the proper lat.nearly.

Retracement of N.bdy.T.35 S., R.7 W.-Continued.

Chains	
	West, on a retracement line bet. secs. 5 and 32.
	Over mountainous land; through scattering timber and dense undergrowth.
	Desc.
4.50	Bottom of hollow, 100 ft. below cor., course N.20°E.
	Asc.
14.00	Top of spur, 100 ft. above hollow, bears N. and S.
	Desc.
30.00	Bottom of hollow, 50 ft. below spur, course N.
	Asc.
55.00	Top of ridge, 50 ft. above hollow, bears S.70°E. and SW.
	Desc.
59.54	Fall 15 lks. N. of the $\frac{1}{2}$ sec.cor. bet. secs. 5 and 32, which is a granite stone, 7x10x5 ins. above ground, firmly set, and mkd. and witnessed as described by the surveyor general. I destroy the old cor. and re-establish it in the same place as follows: Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for $\frac{1}{2}$ sec.cor.. mkd. on brass cap $\frac{1}{2}$ S 32 in N half and S 5 in S half; from which
	A cedar, 18 ins. dia., bears N.46°W., 28 lks. dist.. mkd. $\frac{1}{2}$ S 32 B T.
	A cedar, 10 ins. dia., bears S.28°30'E., 33 lks. dist.. mkd. $\frac{1}{2}$ S 5 B T. ✓
	Leave dense undergrowth and enter scattering undergrowth bears N. and S.
	Enter heavy timber, bears N. and S.
48.90	Leave timber, bears N. and S.
	Enter dense oak and buck brush, bears N. and S..
60.00	Leave oak and buck brush and enter sage brush, bears NW and SE.
	Enter scattering timber, bears NW and SE.

Retracement N.bdy.T.33.S.,R.7.W.-Continued.

Chains	
73.50	Bottom of hollow, 500 ft. below ridge, course NW.
Asc..	
79.00	Top of ridge, 100 ft. above hollow, bears N.40°W. and S.60°E
Desc.	
79.57	Fall 72 lks. S.of the cor.of secs.5,6,31, and 32, which is quartz stone, 6x14x6 ins.above ground, firmly set and mkd.and witnessed as described by the surveyor general. I replace the cor.stone by an iron post as follows. Set an iron post, 3 ft.long, 3 ins.in dia., 20 ins.in the ground, on bed rock, and surrounded by mound of earth and stone, for cor.of secs.5,6,31, and 32,mkd.on brass cap T 32 S 3 E 31 in NW. R 7 W S 32 in NE. R 7 W S 5 in SE.; and . T 33 S 3 6 in SW.quadrants;No change in bearing trees and bearing object from original notes. The course of the east half of this mile is therefore S.89°47'W.;39.54 cks.;the west half is N.88°56'W.39.84 cks. Land, mountainous ,slopes gradual and smooth. Soil, clay loam mixed with rock and gravel, subsoil,clay Timber, cedar and pinon pine. Undergrowth, oak,sage, and buck brush. Good grass for grazing. Mountainous or heavily timbered land, or land covered with dense undergrowth, 79.57 cks. West, on a retrace ment line bet.secs.6 and 31. Over mountainous land;through heavy cedar and pinon pine timber .. Desc.. 21.00
4.50	Bottom of hollow, 100 ft. below cor., course N.10°W. AL.CR..

Retracement H. Bdy. T. 35. S., R. 7. W. -Continued.

Chains	
	Asc.
15.00	Top of spur, 50 ft. above hollow, bears N. and S.
	Desc.
16.50	Bottom of hollow, 40 ft. below spur, course N.15°E.
	Asc.
27.00	Top of spur, 100 ft. above hollow, bears N. and S.
	Desc.
32.00	Head of hollow, 100 ft. below spur, course N.50°W.
	Asc.
35.00	Top of ridge, 75 ft. above hollow, bears NW and SE.
	Desc.
40.24	Fall 7 lks. S. of the $\frac{1}{2}$ sec. cor. bet. secs. 6 and 51, which is a granite stone, 7x14x9 ins., above ground, firmly set, and mkd. and witnessed as described by the surveyor general. I destroy the old cor. and re-establish it in the same place as follows: Set an iron post, 3 ft. long, 1 in. i dia., 26 ins. in the ground, for $\frac{1}{2}$ sec. corl. mkd. on brass cap $\frac{1}{4}$ S 31 in N. Half and S 6 in SS half; from which A cedar, 6 ins. dia., bears N.25°W., 27 lks. dist.. mkd. $\frac{1}{4}$ S 51 B.T. A pinon pine, 10 ins. dia., bears S.36°E., 48 lks. dist.. mkd. $\frac{1}{4}$ S 6 B.T.
44.85	Bottom of hollow, 50 ft. below ridge, course N.30°W.
	Asc.
49.00	Top of spur, 75 ft. above hollow, bears N. and S.
	Desc.
55.00	Bottom of hollow, 100 ft. below spur, course N.
	Asc.
61.00	Top of spur, 50 ft. above hollow, bears N. and S.
	Desc.
80.12	Fall 15 lks. S. of the cor. of Tps. 32 and 33 S., Rs. 7 and 8 W., heretofore described! ✓ The course of this line is therefore N.89°54'W., 80.12 chs.

-17-

Retracement N.Bdy.T.33 S., R.7 W.- Continued.

Chains. Land mountaincus.
Soil, clay loam mixed with gravel; 3rd rate.
Timber, cedar and pinon pine.
Undergrowth, oak, sagebrush and buck brush.
A very little grass.
Mountainous or heavily timbered land, or land covered
with dense undergrowth 80.12 chs.

September 26, 1910.

Ginny Stewa
Instrumentman G.L.O.

ITEM	DESCRIPTION	QTY.	UNIT	STOCK NO.	ITEM NO.	DESCRIPTION	QTY.	UNIT	STOCK NO.
54-08	..... 33	YDS		7114701	8	..... 100	PC		7114702
57-08	..... 70.0	PC		7114703	10	..... 100	PC		7114704
67-08	..... 70.0	PC		7114705	10	..... 100	PC		7114706
68-08	..... 60.0	PC		7114707	10	..... 100	PC		7114708
70-08	..... 60.0	PC		7114709	10	..... 100	PC		7114710
71-08	..... 60.0	PC		7114711	10	..... 100	PC		7114712
72-08	..... 60.0	PC		7114713	10	..... 100	PC		7114714
73-08	..... 60.0	PC		7114715	10	..... 100	PC		7114716
74-08	..... 60.0	PC		7114717	10	..... 100	PC		7114718
75-08	..... 60.0	PC		7114719	10	..... 100	PC		7114720
76-08	..... 60.0	PC		7114721	10	..... 100	PC		7114722
77-08	..... 60.0	PC		7114723	10	..... 100	PC		7114724
78-08	..... 60.0	PC		7114725	10	..... 100	PC		7114726
79-08	..... 60.0	PC		7114727	10	..... 100	PC		7114728
80-08	..... 60.0	PC		7114729	10	..... 100	PC		7114730
81-08	..... 60.0	PC		7114731	10	..... 100	PC		7114732
82-08	..... 60.0	PC		7114733	10	..... 100	PC		7114734
83-08	..... 60.0	PC		7114735	10	..... 100	PC		7114736
84-08	..... 60.0	PC		7114737	10	..... 100	PC		7114738
85-08	..... 60.0	PC		7114739	10	..... 100	PC		7114740
86-08	..... 60.0	PC		7114741	10	..... 100	PC		7114742
87-08	..... 60.0	PC		7114743	10	..... 100	PC		7114744
88-08	..... 60.0	PC		7114745	10	..... 100	PC		7114746
89-08	..... 60.0	PC		7114747	10	..... 100	PC		7114748
90-08	..... 60.0	PC		7114749	10	..... 100	PC		7114750
91-08	..... 60.0	PC		7114751	10	..... 100	PC		7114752
92-08	..... 60.0	PC		7114753	10	..... 100	PC		7114754
93-08	..... 60.0	PC		7114755	10	..... 100	PC		7114756
94-08	..... 60.0	PC		7114757	10	..... 100	PC		7114758
95-08	..... 60.0	PC		7114759	10	..... 100	PC		7114760
96-08	..... 60.0	PC		7114761	10	..... 100	PC		7114762
97-08	..... 60.0	PC		7114763	10	..... 100	PC		7114764
98-08	..... 60.0	PC		7114765	10	..... 100	PC		7114766
99-08	..... 60.0	PC		7114767	10	..... 100	PC		7114768
100-08	..... 60.0	PC		7114769	10	..... 100	PC		7114770
101-08	..... 60.0	PC		7114771	10	..... 100	PC		7114772
102-08	..... 60.0	PC		7114773	10	..... 100	PC		7114774
103-08	..... 60.0	PC		7114775	10	..... 100	PC		7114776
104-08	..... 60.0	PC		7114777	10	..... 100	PC		7114778
105-08	..... 60.0	PC		7114779	10	..... 100	PC		7114780
106-08	..... 60.0	PC		7114781	10	..... 100	PC		7114782
107-08	..... 60.0	PC		7114783	10	..... 100	PC		7114784
108-08	..... 60.0	PC		7114785	10	..... 100	PC		7114786
109-08	..... 60.0	PC		7114787	10	..... 100	PC		7114788
110-08	..... 60.0	PC		7114789	10	..... 100	PC		7114790
111-08	..... 60.0	PC		7114791	10	..... 100	PC		7114792
112-08	..... 60.0	PC		7114793	10	..... 100	PC		7114794
113-08	..... 60.0	PC		7114795	10	..... 100	PC		7114796
114-08	..... 60.0	PC		7114797	10	..... 100	PC		7114798
115-08	..... 60.0	PC		7114799	10	..... 100	PC		7114800
116-08 60.0	PC		7114801	10 100	PC		7114802
117-08 60.0	PC		7114803	10 100	PC		7114804
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119-08 60.0	PC		7114807	10 100	PC		7114808
120-08 60.0	PC		7114809	10 100	PC		7114810
121-08	..... 60.0	PC		7114811	10	..... 100	PC		7114812
122-08	..... 60.0	PC		7114813	10	..... 100	PC		7114814
123-08	..... 60.0	PC		7114815	10	..... 100	PC		7114816
124-08	..... 60.0	PC		7114817	10	..... 100	PC		7114818
125-08	..... 60.0	PC		7114819	10	..... 100	PC		7114820
126-08	..... 60.0	PC		7114821	10	..... 100	PC		7114822
127-08	..... 60.0	PC		7114823	10	..... 100	PC		7114824
128-08	..... 60.0	PC		7114825	10	..... 100	PC		7114826
129-08	..... 60.0	PC		7114827	10	..... 100	PC		7114828
130-08	..... 60.0	PC		7114829	10	..... 100	PC		7114830
131-08	..... 60.0	PC		7114831	10	..... 100	PC		7114832
132-08	..... 60.0	PC		7114833	10	..... 100	PC		7114834
133-08	..... 60.0	PC		7114835	10	..... 100	PC		7114836
134-08	..... 60.0	PC		7114837	10	..... 100	PC		7114838
135-08	..... 60.0	PC		7114839	10	..... 100	PC		7114840
136-08	..... 60.0	PC		7114841	10	..... 100	PC		7114842
137-08 60.0	PC		7114843	10 100	PC		7114844
138-08 60.0	PC		7114845	10 100	PC		7114846
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140-08 60.0	PC		7114849	10 100	PC		7114850
141-08 60.0	PC		7114851	10 100	PC		7114852
142-08	..... 60.0	PC		7114853	10	..... 100	PC		7114854
143-08	..... 60.0	PC		7114855	10	..... 100	PC		7114856
144-08	..... 60.0	PC		7114857	10	..... 100	PC		7114858
145-08	..... 60.0	PC		7114859	10	..... 100	PC		7114860
146-08	..... 60.0	PC		7114861	10	..... 100	PC		7114862
147-08	..... 60.0	PC		7114863	10	..... 100	PC		7114864
148-08	..... 60.0	PC		7114865	10	..... 100	PC		7114866
149-08	..... 60.0	PC		7114867	10	..... 100	PC		7114868
150-08	..... 60.0	PC		7114869	10	..... 100	PC		7114870
151-08	..... 60.0	PC		7114871	10	..... 100	PC		7114872
152-08	..... 60.0	PC		7114873	10	..... 100	PC		7114874
153-08	..... 60.0	PC		7114875	10	..... 100	PC		7114876
154-08	..... 60.0	PC		7114877	10	..... 100	PC		7114878
155-08	..... 60.0	PC		7114879	10	..... 100	PC		7114880
156-08	..... 60.0	PC		7114881	10	..... 100	PC		7114882
157-08	..... 60.0	PC		7114883	10	..... 100	PC		7114884
158-08	..... 60.0	PC		7114885	10	..... 100	PC		7114886
159-08 60.0	PC		7114887	10 100	PC		7114888
160-08 60.0	PC		7114889	10 100	PC		7114890
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162-08 60.0	PC		7114893	10 100	PC		7114894
163-08 60.0	PC		7114895	10 100	PC		7114896
164-08 60.0	PC		7114897	10 100	PC		7114898
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169-08 60.0	PC		7114907	10 100	PC		7114908
170-08 60.0	PC		7114909	10 100	PC		7114910
171-08	..... 60.0	PC		7114911	10	..... 100	PC		7114912
172-08	..... 60.0	PC		7114913	10	..... 100	PC		7114914
173-08	..... 60.0	PC		7114915	10	..... 100	PC		7114916
174-08 60.0	PC		7114917	10 100	PC		7114918
175-08 60.0	PC		7114919	10 100	PC		7114920
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177-08 60.0	PC		7114923	10 100	PC		7114924
178-08 60.0	PC		7114925	10 100	PC		7114926
179-08	..... 60.0	PC		7114927	10	..... 100	PC		7114928
180-08	..... 60.0	PC		7114929	10	..... 100	PC		7114930
181-08	..... 60.0	PC		7114931	10	..... 100	PC		7114932
182-08	..... 60.0	PC		7114933	10	..... 100	PC		7114934
183-08	..... 60.0	PC		7114935	10	..... 100	PC		7114936
184-08	..... 60.0	PC		7114937	10	..... 100	PC		7114938
185-08	..... 60.0	PC		7114939	10	..... 100	PC		7114940
186-08	..... 60.0	PC		7114941	10	..... 100	PC		7114942
187-08	..... 60.0	PC		7114943	10	..... 100	PC		7114944
188-08	..... 60.0	PC		7114945	10	..... 100	PC		7114946
189-08	..... 60.0	PC		7114947	10	..... 100	PC		7114948
190-08	..... 60.0	PC		7114949	10	..... 100	PC		7114950
191-08	..... 60.0	PC		7114951	10	..... 100	PC		7114952
192-08	..... 60.0	PC		7114953	10	..... 100	PC		7114954
193-08	..... 60.0	PC		7114955	10	..... 100	PC		7114956
194-08	..... 60.0	PC		7114957	10	..... 100	PC		7114958
195-08	..... 60.0	PC		7114959	10	..... 100	PC		7114960
196-08	..... 60.0	PC		7114961	10	..... 100	PC		7114962
197-08	..... 60.0	PC		7114963	10	..... 100	PC		7114964
198-08	..... 60.0	PC		7114965	10	..... 100	PC		7114966
199-08	..... 60.0	PC		7114967	10	..... 100	PC		7114968
200-08	..... 60.0	PC		7114969	10	..... 100	PC		7114970
201-08	..... 60.0	PC		7114971	10	..... 100	PC		7114972
202-08	..... 60.0	PC		7114973	10	..... 100	PC		7114974
203-08	..... 60.0	PC		7114975	10	..... 100	PC		7114976
204-08	..... 60.0	PC		71149					

BOUNDARIES OF T.33 S., R.7 W.

LATITUDES DEPARTURES AND CLOSING ERRORS.

Lines Designated True		Dist.	Latitudes,		Departures.	
	Bearing		N.	S.	E.	W.
			chs.	chs.	chs.	chs.
West Boundary	North	405.57	405.57			
West Boundary	N. $0^{\circ}05'W.$	79.28	79.28			.12
North Boundary	S. $89^{\circ}54'E.$	80.12		.14	80.12	
North Boundary	N. $89^{\circ}47'E.$	39.54	.13		39.54	
North Boundary	S. $88^{\circ}58'E.$	39.84		.73	39.83	
North Boundary	N. $89^{\circ}58'E.$	39.57	.03		39.57	
North Boundary	S. $88^{\circ}00'E.$	38.66		1.35	38.64	
North Boundary	N. $89^{\circ}44'E.$	80.47	.37		80.47	
North Boundary	N. $88^{\circ}22'E.$	83.02	2.37		82.99	
E.Bdy.Sec.2	S. $1^{\circ}40'E.$	43.50		43.48	1.26	
E.Bdy.Sec.2	S. $0^{\circ}33'E.$	42.90		42.90	.41	
E.Bdy.Sec.11	S. $0^{\circ}08'E.$	77.96		77.96	.18	
S.Bdy.Sec.11	S. $86^{\circ}28'W.$	38.73		2.39		38.66
S.Bdy.Sec.11	West	40.10				40.10
E.Bdy.Sec.15	S. $0^{\circ}07'E.$	80.58		80.58	.17	
S.Bdy.Sec.15	N. $89^{\circ}43'W.$	79.96	.40			79.96
E.Bdy.Sec.21	South	80.14		80.14		
S.Bdy.Sec.21	N. $89^{\circ}53'W.$	79.95	.17			79.95
E.Bdy.Sec.29	South	80.00		80.00		
E.Bdy.Sec.32	S. $0^{\circ}03'E.$	79.98		79.98	.07	
South Boundary	N. $89^{\circ}20'W.$	40.37	.46			40.37
South Boundary	N. $89^{\circ}22'W.$	40.15	.44			40.15
South Boundary	N. $89^{\circ}57'W.$	85.06	.08			85.06
Convergency			485.29	485.65	.33	
T o t a l s		489.29	489.65	403.58	404.37	
				489.29		403.58
Error in lat.and dep.				.36		.79

Boundaries of T.33 S., R.7 W.-Continued.

GENERAL DESCRIPTION.

For General description see notes of subdivision of
T.33 S., R.7 W.

Quinby Stewart
John R Stewart
Instrumentmen G.L.O.

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Page**

FINAL OATHS OF DEPUTY SURVEYOR AND HIS ASSISTANTS.

LIST OF NAMES.

A list of the names of the individuals employed by _____, United States Deputy Surveyor, to assist in running, measuring, and marking the lines and corners described in the foregoing field notes of the survey of _____

knowing the respective capacities in which they acted:

_____, Chainman.
 For list of names and final oath of assistants see book "I", Chainman.
 T.32 S., R. 6 W. _____, Moundman.
 _____, Moundman.
 _____, Axman.
 _____, Axman.
 _____, Flagman.

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted _____, United States Deputy Surveyor, in surveying all those parts or portions of the _____ of the _____

meridian, _____ of _____, which are represented in the foregoing field notes as having been surveyed by him and under his direction; and that said survey has been in all respects, to the best of our knowledge and belief, well and faithfully surveyed, and the corner monuments established, according to the instructions furnished by the United States Surveyor General for _____

_____, Chainman.
 _____, Chainman.
 _____, Moundman.
 _____, Moundman.
 _____, Axman.
 _____, Axman.
 _____, Flagman.

Subscribed and sworn to before me this _____
 day of _____, 190_____ }

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FINAL OATH OF UNITED STATES DEPUTY SURVEYOR.

I, _____, United States Deputy Surveyor, solemnly swear that, in pursuance of a contract received from _____, United States Surveyor General for _____, bearing date of _____ day of _____, 190_____, I have well, faithfully, and truly, in my proper person, and in strict conformity with the instructions furnished by the United States Surveyor General for _____, the Manual of Surveying Instructions, and the laws of the United States, surveyed all those parts or portions of _____.

For final oaths of transitmen see books "I" T.32 S.R.6 W. and "Z11" T.31 S., R.9 W.

of the _____ meridian, in the _____ of _____, which are represented in foregoing field notes as having been surveyed by me, and under my direction; and I do further solemnly swear that all the corners of said survey have been established and perpetuated in strict accordance with the Manual of Surveying Instructions, and the special written instructions of the United States Surveyor General for _____ and in the specific manner described in the field notes, and that the foregoing are the original field notes of such survey.

United States Deputy Surveyor

Subscribed by said _____, and sworn to before me }
this _____ day of _____, 190_____ }



APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Salt Lake City, Utah, January 7, 1914.

The foregoing field notes of the survey of the east, and retracement of the north, south, and east boundaries of Township No. 33 South, Range No. 7 West of the Salt Lake Base and Meridian, Utah,

executed by John R. Stewart and Quinby Stewart
under their special instructions August 6, 1910, having been critically examined, and the necessary corrections and explanations made, the said field notes, and surveys they describe, are hereby approved.

Thomas H. Bell
United States Surveyor General

I certify that the foregoing transcript of the field notes of the above-described surveys in _____, has been correctly copied from the original notes on file in this office.

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Page

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Page

4-679.

F.

BOOK A-384

FILED

FEB 7 1911

FIELD NOTES

R.S.B.

OF THE SURVEY OF THE

SUBDIVISION AND RETRACEMENT SUBDIVISION

of

Township No. 33 South, Range No. 7 West

Of the Salt Lake Base and Meridian,

State of Utah.

AS SURVEYED BY

U.S. Transitmen

John R. Stewart and Quinby Stewart, United States Deputy Surveyor;

Assignment Group No. 1
Under his Contract No. , dated August 6, 1910, #101

Survey commenced September 13, 1910, #101

Survey completed October 1, 1910, #101

Debt due - 15 + 05 + 3
- 11 - 45 - 5

27-01

Sect. 14 - 1834

NAMES AND DUTIES OF ASSISTANTS.

Frank G. Allen, Chairman.

Albert Carter, Chairman.

August M. Riley, Woundman.

Isaac E. Hayes, Axman.

William Carter, Flagman.

Vernon G. Nelson, Chairman.

Alton Ivie, Chairman.

Harvey W. Elliott, Woundman.

Nicholas L. Sheffield, Axman.

Kilo Nelson, Flagman.

For prel. affidavits see notes of Subdivision T.33 S., R.8 W. book "D"

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BOOK A-384

INDEX DIAGRAM.

Township.....53 South...., Range 7 West.....

	76	5	50	4	39	8	32	2	19	1
74	72		48		36		29			
7	70	8	47	9	37	10	29	11	17	12
69	66		45		34		14		16	
68	66	17	46	16	34	15	12	14		13
64	63		42		7					
62	61	20	40	21	6	22	9	23		24
60	57		4							
58	56	29	3	28		27	11	26		25
54	53						22		24	
51	51	52	1	53		54	21	55	26	56

Meanders Page.....

PRELIMINARY OATHS OF ASSISTANTS.

WE,

and

do solemnly swear that we will well and faithfully execute the duties of chainmen; that we will level the chain upon even and uneven ground, and plumb the tally pins, either by sticking or dropping the same; that we will report the true distances to all notable objects, and the true lengths of all lines that we assist in measuring, to the best of our skill and ability, and in accordance with instructions given us, in the survey

, Chainm

, Chainm

Subscribed and sworn to before me this }
day of , 190 }



WE,

and

do solemnly swear that we will well and truly perform the duties of moundmen in the establishment of corners, according to the instructions given us, to the best of our skill and ability, in the survey

, Moundm

, Moundm

Subscribed and sworn to before me this }
day of , 190 }



WE,

and

do solemnly swear that we will well and truly perform the duties of axmen in the establishment of corners and other duties, according to instructions given us, to the best of our skill and ability, in the survey

, Axm

, Axm

Subscribed and sworn to before me this }
day of , 190 }



I, , do solemnly swear that I will well and truly perform the duties of flagman according to instructions given me, to the best of my skill and ability, in the survey of .

William Carter, Flagm

Subscribed and sworn to before me this }
day of , 190 }



Retracement Subdivision of T.33 S., R.7 W.

Survey commenced September 13, 1910, and executed with a W. and L.E. Gurley Explorer's transit No. 957, with solar attachment. The horizontal limb is provided with two double verniers placed opposite to each other, reading to single minutes of arc; which is also the least count of the latitude and declination arcs.

The instrument was examined, tested on the meridian at Salt Lake City, found correct and was approved by the surveyor general, on August 6, 1910.

Note: For Complete test of Instrument see notes of Retracement South bdy. T.33 S., R.7 W.

At the cor. of secs. 4, 5, 32, and 33, on S. bdy. of Tp., hereto fore described. latitude $37^{\circ}53'52''$ N., longitude $112^{\circ}37'53''$ W., I set off $37^{\circ}54'N.$, on the lat. arc; $4^{\circ}00'N.$ on the decl. arc; and determine a meridian with the solar, at 7 h 56 m a.m., l.m.t.,

Thence I run

North, on a retracement line bet. secs. 32 and 33.

Over mountainous land; through dense sage brush.

Desc. gradually.

- 8.50 Wood road, bears NW and SE.
- 12.90 Branch of Little Creek, 6 lks. wide, 6 ins. deep, course N. $50^{\circ}W.$
Continue descent.
- 14.70 Little Creek, 5 lks. wide, 5 ins. deep, course N. $60^{\circ}W.$
Asc. gradually.
- 20.00 Wash, 20 lks. wide, 15 ft. deep, course W.
- 22.75 Road from Parowan to Panguitch, bears E. and W.
- 29.00 Begin more abrupt ascent, bears E. and W.
Enter scattering timber, bears E. and W.
- 40.00 Fall 3 lks. E. of 1 sec. cor. bet. secs. 32 and 33, which is a granite stone, 6x12x6 ins., above ground, firmly set, and md, and witness ed as described by the surveyor general
I destroy the old cor. stone, and re-establish the cor. as follows:

Retracement Subdivision T. 53 R. 7 W. 45th sec.

Chains	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for 1 sec.cor.. mkd.on brass cap $\frac{1}{2}$ S 32 in W half and S 33 in E half; No change in bearing trees from original notes.
45.75	Leave timber, bears E. and W.
55.00	Leave undergrowth and enter heavy timber, bears E. and W.
74.00	Leave timber and enter dense undergrowth, bears E. and W.
79.98	Fall 7 lks.E. of the cor.of secs. 28, 29, 32, and 33, which is a rhyolite stone, 10x8x5 ins. above ground, firmly set, and mkt. and witnessed as described by the surveyor general. The marks on the stone are poor; therefore I destroy the old cor. and re-establish it in the same place as follows: Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground, for cor.of secs. 28, 29, 32, and 33, mkd.on brass cap T 33 S S 29 in NW. R 7 W S 28 in NE. S 33 n SE.; and S 32 in SW.quadrants; and raise a mound of stone, 2 ft. base, $\frac{1}{2}$ ft. high, W. of cor. The course of this line is therefore N.0°3'W., 79.98 chs. S.29.00 chs. on gentle slope leading into and out of Little Creek. Rich black loam about 3 ft. deep, subsoil, clay. No timber. Undergrowth, sage brush. H.51.00 chs. is rough and rocky, but what soil there is is rich black loam producing either heavy cedar and pinon pine timber or dense oak and mahogany brush. Mountainous or heavily timbered land, or land covered with dense undergrowth, 79.98 chs. September 13, 1910: At this cor. I set off 5°56'N., on the decl.arc; and at 11 h 56 m. a.m., 1.m.t., I observe the sun on the meridian, the resulting lat. is 37°55'N., which is the proper lat.nearly.

Retracement Subdivision T.33 S., R.7 W.-Continued.

Chains	
	North, on retracement line bet. secs. 28 and 29.
	Over mountainous land; through dense undergrowth.
	Asc.
6.50	Top of ridge, 50 ft. above cor., bears NW and SE.
	Desc.
13.00	Head of hollow, 50 ft. below ridge, course N. 40° E.
	Asc.
39.00	Top of ridge, 75 ft. above hollow, bears NE and SW.
	Desc.
40.00	Intersected $\frac{1}{4}$ sec. cor., bet. secs. 28 and 29, which is a granite stone, 12x10x8 ins., above ground, firmly set, and mkd. and witnessed as described. by the surveyor general. I destroy the old cor. and re-establish it in the same place as follows. Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor.. mkd. on brass cap $\frac{1}{4}$ S 29 in W half and S 28 in E half; and raise a mound of stone, 2 ft. base $1\frac{1}{2}$ ft. high, w. of cor.
73.00	Bottom of canon, 400 ft. below ridge, course N. 30° W.
	Asc.
75.00	Leave undergrowth, bears N. 30° W. and S. 30° E.
	Enter scattering timber, bears N. 30° W. and S. 30° E.
77.00	Seeping spring on line, course W.
80.00	Intersect the cor. of secs. 20, 21, 28, and 29, which is a granite stone, 6x9x7 ins., above ground, loosely set and mkd. and witnessed as described by the surveyor general. I destroy the old cor. and re-establish it in the same place as follows. Set an iron post, 3 ft. long, 2 in. in dia., 24 ins. in the ground, for cor. of secs. 20, 21, 28, and 29, mkd. on brass cap T 33 S S 20 in NW. R 7 W S 21 in NE. S 28 in SE.; and S 29 in SW. quadrants; from which

Retracement of Sub.T.33 S., R.7 W.-Continued.

Chains

A pinon pine, 12 ins. dia., bears S.59°E., 94 lks.

dist..mkd.T 33 S R 7 W S 28 B T.

A pinon pine, 16 ins. dia., bears S.51°W., 64 lks.

dist..mkd.T 33 S R 7 W S 29 B T. No other bearing within limits. Raise mound of stone, 2 ft. base 1 $\frac{1}{2}$ ft. high. W. of the course of this line is therefore North, 80.00 chs.

Land, rolling mountain tops ..

Soil, rich black loam about 1 ft. deep, on hard white clay subsoil.

Timber, cedar and pinon pine.

Undergrowth, sage and oak brush.

Good grass for grazing.

Mountainous land; or land covered with dense undergrowth 80.00 chs.

September 13, 1910.

September 14, 1910: At 6 h 56 m a.m., l.m.t., I set off 37°56'N., on the lat.arc; 3°39'N., on the decl.arc; and determine a meridian with the solar, at the cor.of secs. 20.21, 28, and 29.

Thence I run

N.89°43'E., on a retracement line betsecs. 21 and 28.

Over mountainous land; through scattering timber and scattering undergrowth.

Asc.

2.00 Enter heavy timber, bears NW and SE.

9.00 leave heavy and enter scattering timber, bears NW and SE.

Enter dense undergrowth, bears NW and SE.

15.00 Top of spur, 200 ft. above cor., bears N.60°W. and S.60°E.

Desc.

27.50 Bottom of hollow, 75 ft. below spur, course N.40°W.

Asc.abruptly over volcanic boulders.

40.00 Fall 28 lks.n.of the $\frac{1}{4}$ sec.cor.betsecs. 21 and 28, which

Retracement Subdivision T.33 S., R.7 W.-Continued.

Chains	is a volcanic stone, 7x9x7 ins., above ground, firmly set, and mkd.and witnessed as described by the surveyor general. The stone is poorly mkd.therefore I destroy the old cor.and re-establish it in the same place as follows: Set an iron post, 3 ft.long, 1 in.in dia., 26 ins.in the ground, for $\frac{1}{4}$ sec.cor..mkd.on brass cap $\frac{1}{4}$ S 21 in N half and S 28 in S half;and raise a mound of stone, 2 ft.base $1\frac{1}{2}$ ft.high,W.of cor.
50.00	Top of ridge, 500 ft.ab ve hollow,bears N.and S. Leave timber,bears N.and S. Desc.
58.00	Bottom of hollow, 100 ft below ridge,course S. Asc.
79.95	Fall 56 lks.N.of the cor.of secs.21,22,27, and 28,which is a volcanic stone, 6x8x6 ins., above ground, firmly set and mkd.and witnessed as described by the surveyor general. I destroy the old cor.and re-establish it in the same place as follows: Set an iron post, 3 ft.long, 2 ins.in dia., 24 ins.in the ground, for cor.of secs.21,22,27, and 28,mkd.on brass cap T 33 S S 21 in NW. R 7 W S 22 in NE. S 27 in SE.;and S 28 in SW.quadrants;and raise a mound of stone, 2 ft.base, $1\frac{1}{2}$ ft.high,W.of cor. The course of this mile is therefore S.89°53'E., 79.95 chs. Land,mountainous ,slopes steep and rocky . Soil,clay loam,medium texture,from 8 to 16 ins.deep,con- siderable rock mixed with the soil.Subsoil hard clay. Timber,cedar and pinon pine. Undergrowth,sage ,oak, and buck brush. A very little grass . Mountainous land,or land covered with dense undergrowth, 79.95 chs.

Retracement Subdivision of T.33 S. R.7 W.-Continued.

Chains	September 14, 1910: At this cor. I set off 3°33' N., on the decl. arc; and at 11 h 56 m a.m., l.m.t., I observe the sun on the meridian, the resulting lat. is 37°56' N., which is the proper lat. nearly.
	North, on a retrace ment line bet. secs. 21 and 22.
	Over mountainous land; through dense undergrowth. Asc.
10.00	Top of ridge, bears N W. and SE. Desc.
26.50	Bottom of hollow, 200 ft. below cor., course N.30°E. ✓ Asc.
37.00	Top of spur, 100 ft. above hollow, bears E. and W. Desc.
40.02	intersect the $\frac{1}{4}$ sec. cor. bet. secs. 21 and 22, which is a granite stone, 6x8x7 ins., above ground, firmly set, and mkd. and witnessed as described by the surveyor general. I destroy the old cor. and re-establish it in the same place as follows:
	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor.. mkd. on brass cap $\frac{1}{4}$ S 21 in W half and S 22 in E half; from which
	A mahogany, 8 ins. dia., bears S.13°E., 65 lks. dist.. mkd. $\frac{1}{4}$ S 22 B T.
	A mahogany, 4 ins. dia., bears S.65°W., 38 lks. dist.. mkd. $\frac{1}{4}$ S 21 B T. ✓
44.50	Bottom of hollow, 150 ft. below ridge, course NW. Creek, 1 lks. wide, $\frac{1}{2}$ in. deep, in bottom. Asc.
57.00	Top of spur, 50 ft. above hollow, bears E. and W. Desc.
64.00	Enter scattering pinon pine and red pine timber, bears E. and W.
76.75	Creek, 1 lk. wide, 1 in. deep, in bottom of canon, 200 ft.

Retracement Subdivision T.33 S., R.7 W.-Continued.

Chains below spur, course SW.

Asc.

77.00 Leave timber and enter dense oak brush, bears NE and SW.

80.14 Intersect the cor. of secs. 15, 16, 21, and 22, which is a granite stone, 8x8x7 ins. above ground, firmly set, and mkd. and witnessed as described by the surveyor general.
I destroy the old cor. and re-establish it in the same place as follows:
Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground, for cor. of secs. 15, 16, 21, and 22, mkd. on brass cap
T 33 S 8 16 in NW.
R 7 W S 15 in NE.
S 22 in SE.; and
S 21 in SW. quadrants; from which
A pinon pine, 9 ins. dia., bears S. 15° E., 13 lks.
dist.. mkd. T 33 S 8 7 W S 22 B T.
No other trees within limits; raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$ ft. high, W. of cor.
The course of this line is therefore North, 80.14 chs.
Land, mountainous ridges somewhat rolling with smooth slopes.
Soil, clay loam, rich and quite moist about 18 ins. deep, on subsoil of clay.
Timber, pinon pine and red pine.
Undergrowth, oak, service berry, buck, and sage brush.
Some good grass.
Mountainous land, or land covered with dense undergrowth, 80.14 chs.

September 14, 1910.

September 15, 1910: At 6 h 55 m a.m., l.m.t., I set off 37° 56' N., on the lat. arc; 3° 16' N., on the decl. arc; and determine a meridian with the solar, at the cor. of secs. 15, 16,

Retracement Subdivision T.33 S., R.7 W.-Continued.

Chains	21, and 22. Thence I run N.89°41'E., on a retracement line bet. secs. 15 and 22. Over mountainous land, through dense undergrowth of oak brush. Desc. abruptly.
1.50	Enter heavy aspen timber, bears NE and SW.
3.60	Creek, 1 lk. wide, 1 in. deep, in bottom of canon, 50 ft. below cor., course SW.
	Asc.
4.00	Leave timber, bears NE and SW.
31.00	Top of spur, 150 ft. above canon, bears N. and S. Desc.
40.00	Fall 42 lks. N. of the $\frac{1}{4}$ sec. cor. bet. secs. 15 and 22, which is a granite stone, 7x9x6 ins., above ground, loosely set and mkd. and witnessed as described by the surveyor general. I destroy the old cor. and re-establish it in the same place as follows: Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor.. mkd. on brass cap $\frac{1}{4}$ S 15 in N half and S 22 in S half; and raise a mound of stone, 2 ft. base $1\frac{1}{2}$ ft. high, N. of cor.
41.00	Bottom of hollow, 100 ft. below spur, course N. 60° W. Asc.
65.00	Top of ridge, 250 ft. above hollow, bears NE and SW. Desc.
66.00	Enter volcanic rocks and boulders. bears NE and SW.
79.96	Fall 84 lks. N. of the cor. of secs. 14, 15, 22, and 23, which is a volcanic stone, 13x10x9 ins. above ground, firmly set and mkd. and witnessed as described by the surveyor general. I destroy the old cor. and re-establish it in the same place as follows. Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground, for cor. of secs. 14, 15, 22, and 23, mkd. on brass cap T 33 S S 15 in NW.

Retracement Subd vision T.33 S., R.7 W. Continued.

Chains	<p>R.7 W S 14 in NE. S 23 in SE.;and S 22 in SW.quadrants;and raise a mound of stone, 2 ft.base, $1\frac{1}{2}$ ft.high,W.of cor. The course of this line is therefore S.89°43'E., 79.96 chs. Land, mountainous, slopes are steep and smooth with the exception of the E.13.96 chs. which is broken and rocky. Soil, clay and gravelly loam on entire mile, rocks mixed with the soil on E.13.96 chs. Subsoil, clay and gravel. Timber, aspen on W. part from 1.50 to 4.00 chs. point. Undergrowth, oak, service berry, buck, and sage brush on entire mile. A very little grass. Mountainous or heavily timbered land, or land covered with dense undergrowth, 79.96 chs. September 15, 1910: At this cor. I set off 3°10' N., on the decl.arc; and at 11 h. 55m a.m., l.m.t., I observe the sun on the meridian, the resulting lat. is 37°56' N., which is the proper lat. nearly.</p>
	<p>South, on a retracement line bet.secs.22 and 23. Over-mountainous land; through dense oak, buck, and sage brush.</p>
Desc.	
10.50	Foot of steep descent, 100 ft. below cor., bears NE and SW.
	Enter Upper Bear Valley.
	Leave oak and buck brush, bears NE and SW.
	Enter dense sage brush, bears NE and SW.
40.00	Fall 10 lks. west of the $\frac{1}{4}$ sec.cor. bet.secs.22 and 23, which is volcanic stone, 6x10x8 ins., above ground, firmly set, and mkd. and witnessed as described by the surveyor general. I destroy the old cor. and re-establish it in the same

Retracement Sub.T.33 S., R.7 W.-Continued.

Chains

place as follows:

Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for $\frac{1}{2}$ sec.cor..mkd.on brass cap $\frac{1}{2}$ S 22 in W half and S 23 in E half; dig pits, 18x18x12 ins.N.and S.of post 3 ft.dist.; and raise a mound of earth, $3\frac{1}{2}$ ft.base. $1\frac{1}{2}$ ft. high,W.of cor.

- 41.60 Road from Parowan to Panguitch bears N.20°E.and S.20°W.
 45.00 Another branch of same road,bears NE and SW.
 57.10 Wash,20 lks.wide,3 ft.deep,course N.30°E.
 Asc.gradually.
 74.00 Top of low ridge in valley,25 ft.above wash,bears NE and SW.
 Desc.over volcanic rocks.

80.17 Fall 8 lks.W.of the cor.of secs.22,23,26, and 27,which is a volcanic stone,10x8x6 ins.above ground,firmly set, and mkd, and witnessed as described by the surveyor general. I destroy the old cor. and re-establish it in the same place as follows:

Set an iron post, 3 ft. long, 2 ins. in dia., 14 ins. in the ground, on bed rock, and surrounded by mound of earth and stone, for cor.of secs.22,23,26, and 27,mkd.on brass cap

T 33 S S 22 in NW.

R 7 W S 23 in NE.

S 26 in SE.;and

S 27 in SW.quadrants; and raise a mound of stone 2 ft.base, $1\frac{1}{2}$ ft.high,W.of cor.

The course of the north half of this mile is therefore 40.00 chs.

S.0°9'E and the S.half is S.0°01'W.40.17 chs.

N.10.50 chs.is mountainous land on South slope of ridge Soil,clay loam about 12 ins.deep,mixed with volcanic rock,N6.timber.Undergrowth,oak,buck brush and sage .
 S.69.67 chs.in upper Bear valley elevation about 8,000 ft
 Soil,black loam,rich and about 2 ft.deep,subsoil,clay.
 No timber.Undergrowth sage brush.

Retracement Subdivision T.33 S., R.7 W.-Continued.

Chains	
	Mountainous land, or land covered with dense undergrowth, 80.17 chs.
	South, on a retracement line bet. secs. 26 and 27. Over rolling land in Upper Bear Valley; through dense sage brush.
	Desc. gradually.
9.30	North edge of shallow lake or pond, circular in shape and about 2 ft. deep in deepest place.
21.70	South edge of lake.
39.60	Fall 141 lks. W. of the $\frac{1}{4}$ sec. cor. bet. secs. 26 and 27, which is a granite stone, 9x10x5 ins. above ground, firmly set, and mkd. and witnessed as described by the surveyor general. I destroy the old cor. and re-establish it in the same place as follows: Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor.. mkd. on brass cap $\frac{1}{2}$ S 27 in W half and S 26 in E half; dig pits, 18x18x12 ins., N. and S. of post, 3 ft. dist.; and raise a mound of earth, $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high, W. of cor.
56.70	Wood road, bears N. 25° W. and S. 25° E.
65.00	Enter scattering buck brush, bears E. and W.
79.75	Fall 184 lks. W. of the cor. of secs. 26, 27, 34, and 35, which is a volcanic stone, 14x12x6 ins., above ground, firmly set and mkd. and witnessed as described by the surveyor general. The bearing trees are both dead and partly decayed; I therefore destroy the old cor. and re-establish it in the same place as follows: Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground, for cor. of secs. 26, 27, 34, and 35, mkd. on brass cap T 33 S S 27 in NW.

Retracement Sub :T.33 S., R.7 W.-Continued.

Chains

R 7 W S 26 in NE.

S 35 in SE.; and

S 34 in SW. quadrants; from which

A yellow pine, 46 ins. dia., bears $284^{\circ}30' E.$, 295 lks. dist.. mkd. T 33 S R 7 W S 26 B T.An aspen, 8 ins. dia., bears $75^{\circ}30' E.$, 170 lks. dist.. mkd. T 33 S R 7 W S 35 B T.An aspen, 7 ins. dia., bears $35^{\circ}45' W.$, 85 lks. dist.. mkd. T 33 S R 7 W S 34 B T.No other trees within limits; raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.The course of the north half of this line is therefore $S.2^{\circ}02'E.39.63$ chs. the south half is $S.0^{\circ}10'E.40.15$ chs.

Land, rolling valley.

Soil, rich black loam about 2 ft. deep, no rocks except on N. 9.30 chs. Subsoil, clay.

No timber.

Undergrowth, sage brush and buck brush.

Good grass for grazing.

Land covered with dense undergrowth, 79.75 chs.

September 15, 1910.

September 16, 1910: At 7 h 55 m a.m., l.m.t., I set off $37^{\circ}56' N.$, on the lat.arc; $2^{\circ}51' N.$, on the decl.arc; and determine a meridian with the solar, at the cor.of secs.

14, 15, 22, and 23.

Thence I run

North, on a retracement line bet.secs. 14 and 15.

Over mountainous land; through dense oak, buck, and mahogany brush.

Asc. over volcanic rocks and boulders.

Retracement Sub.T.33 S., R.7 W.-Continued.

Chains	
10.00	Foot of volcanic ledges, bears NE and SW.
11.50	Leave ledges, bears NE and SW.
26.00	Top of ridge, 300 ft. above cor., bears NE and SW.
	Desc.
35.00	Enter scattering cedar and pinon pine timber, bears NE and SW.
40.35	Fall 8 lks.E. of the $\frac{1}{4}$ sec.cor., betsecs.14 and 15, which is a granite stone, 6x8x5 ins., above ground, firmly set, and mkd.and witnessed as described by the surveyor general. I destroy the old cor.and re-establish it in the same place as follows: Set an iron post, 3 ft.long, 1 inlin dia., 26 ins.in the ground, for $\frac{1}{4}$ sec.cor..mkd.on brass cap $\frac{1}{4}$ S 15 in W half and S 14 in E half;from which A pine, 14 ins.dia., bears N.57°E., 40 lks. dist..mkd. $\frac{1}{4}$ S 14 B T. A mahogany, 5 ins.dia., bears N.83°W., 25 lks. dist..mkd. $\frac{1}{4}$ S 15 B T.
46.50	Bottom of canon, 300 ft.below ridge, course N.60°W.
	Asc.
65.00	Top of ridge, 300 ft.above canon, bears N.70°E.and S.70°W.
	Desc.
71.50	Head of hollow, 150 ft.below ridge, course N.80°W.
	Asc.
74.40	Top of spur, 50 ft.above hollow, bears N.60°W.and S.60°E.
	Desc.
76.60	Bottom of hollow, 50 ft. ^{below} spur, course N.60°W.
	Asc.
80.58	Fall 16 lks.E. of the cor.of secs.10,11,14, and 15, which is a granite stone, 8x9x7 ins., above ground, firmly set, and mkd.and witnessed as described by the surveyor general. I destroy the old cor.and re-establish it in the same place as follows:

Retracement Subdivision of T.33 S., R.7 W.-Continued.

Chains

Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground, for cor. of secs. 10, 14, and 15, mkd. on brass cap.

T 33 S S 10 in NW.

R 7 W S 11 in NE.

S 14 in SE.; and

S 15 in SW. quadrants; from which

A mahogany, 8 ins. dia., bears N.65°E., 24 lks.
dist.. mkd. T 33 S R 7 W S 11 B T.

A mahogany 6 ins. dia., bears S.5°31'E., 31 lks.
dist.. mkd. T 33 S R 7 W S 14 B T.

No other trees within limits; raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.

The course of this line is therefore N.0°7'W., 80.58 chs.
Land, mountainous, steep slopes and rocky.

Soil, clay loam well mixed with rock, about 1 ft. deep,
subsoil gravel.

Timber, cedar and pinon pine.

Undergrowth, oak, mahogany, buck, and sage brush.

Good grass for grazing.

Mountainous land, or land covered with dense undergrowth
80.58 chs.

September 16, 1910: At this cor. I set off 2°47'N., on the decl. arc; and at 11 h 55 m a.m., l.m.t., I observe the sun on the meridian, the resulting lat. is 37°57'N., which is the proper lat. nearly.

September 22, 1910: At 7 h 53 m a.m., l.m.t., I set off 37°57'N., on the lat. arc; 0°32'N., on the decl. arc; and determine a meridian with the solar, at the cor. of secs. 10, 11, 14, and 15.

Thence I run

S.89°52'E., on a retrace ment line bet. secs. 11 and 14.

Retracement Subdivision T.33 S., R.7 W.-Continued.

Chains	Over mountainous land; through scattering timber and scattering undergrowth.
Asc.	
1.00	Enter dense mahogany brush, bears N. and S.
19.50	Top of main ridge, 200 ft. above cor., bears NE and SW.
Desc.	
30.00	Bottom of hollow, 200 ft. below ridge, course S.75°E.
	Continue descent.
40.10	Fall 9 1/2 s. of 1 sec.cor. bet.secs.11 and 14, which is a granite stone, 5x8x6 ins., above ground, firmly set, and mkd. and witnessed as described by the surveyor general, the cor. is poorly mkd. I therefore destroy the old cor. and re-establish it in the same place as follows: Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for 1/2 sec.cor.. mkd. on brass cap $\frac{1}{4}$ S 11 in N half and S 14 in S half; from which A mahogany, 8 ins. dia., bears N.57°E. , 53 lks. dist.. mkd. $\frac{1}{4}$ S 11 B T. Amahogany, 6 ins. dia., bears S.26°W., 13 lks. dist.. mkd. $\frac{1}{4}$ S 14 B T.
58.00	Foot of descent, 1000 ft. below ridge, brs. NE and SW. Enter valley
78.76	Fall 248 lks. S. of the cor. of secs.11,12,13, and 14, which is a granite stone, 7x9x7 ins., above ground, firmly set, and mkd. and witnessed as described by the surveyor general, The cor. is poorly mkd, and partly decayed; therefore I. destroy the old cor. and re-establish it in the same place as follows: Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground, for cor. of secs.11,12,13, and 14, mkd. on brass cap T 33 S S 11 in NW. R 7 W S 12 in NE. S 13 in SE.; and S 14 in SW.quadrants; and raise a mound of stone, 2 ft. base, 1 1/2 ft. high, w.of cor. The course of the west half of this mile is therefore East 40.10 chs.; the east half is N.86°28'E., 38.73 chs.

Retracement Subdivision T.33 S., R.7 W.-Continued.

Chains	<p>W.58.00 chs. rough and steep mountain soil, clay loam about 1 ft. deep, mixed with considerable rock and gravel. Timber scattering cedar and pinon pine. Undergrowth, mahogany and oak brush. Good grass. E.20.76 chs. is in Upper Bear Valley gentle slope to the east. Soil rich clay loam with patches of rock and gravel running through it. No timber. Undergrowth, sage brush and oak and mahogany.</p> <p>Mountainous land, or land covered with dense undergrowth, 78.76 chs.</p> <p>September 22, 1910: At this cor. I set off $0^{\circ}27'N.$, on the decl. arc; and at 11 h 53 m a.m., l.m.t., I observe the sun on the meridian the resulting lat. is $37^{\circ}57'N.$, which is the proper lat. nearly.</p> <hr/> <p>$S89^{\circ}57'E$ on a retracement line bet. secs. 12 and 13.</p> <p>Over rolling land in Upper Bear Valley; through dense sage and oak brush.</p> <p>Desc. gently.</p>
40.50	Fall 91 lks. S. of the $\frac{1}{4}$ sec. cor. bet. secs. 12 and 13, which is a sandstone, 9x12x4 ins., above ground, firmly set, and mkd. and witnessed as described by the surveyor general.
55.50	Road from Parowan to Panguitch bears N. and S.
66.50	Road, bears N. $20^{\circ}W.$ and S. $20^{\circ}E.$.
66.75	Pole fence, bears N. $20^{\circ}W.$ and S. $20^{\circ}E.$
	Enter pasture.
	Leave undergrowth and enter meadow grass, bears N. $20^{\circ}E.$ and S. $20^{\circ}W.$
70.90	Fence, bears North.. and South.. Leave pasture.
80.94	Fall 181 lks. S. of the cor. of secs. 7, 12, 13, and 18, which is a volcanic stone, 6x8x6 ins., above ground, firmly set, and mkd. and witnessed as described by the surveyor general.
.3nt	The course of the west half of this mile is therefore

Retracement Subdivision of T.33 S., R.7 W.-Continued.

Chains

N. $88^{\circ}46' E.$, 40. 51 chs. and the east half is N. $88^{\circ}46' E.$,
40. 45 chs.

Land, nearly level valley.

Soil, rich black loam; 1st rate about 2 ft. deep, subsoil,
clay.

No timber.

Undergrowth, sage brush on W. 66. 75 chs.

Good meadow grass on E. 14. 21 chs.

Land covered with dense undergrowth, 66. 75 chs.

September 22, 1910.

September 23, 1910: At 7 h 53 m a.m., l.m.t., I set off 37 $57'$
N., on the lat.arc; 0 $08' N.$, on the decl.arc; and determine a
meridian with the solar at the cor.of secs. 11, 12, 13, and
14.

Thence I run

North, on a retracement line bet.secs. 11 and 12.

Over nearly level land in Upper Bear Valley; through dense
sage and scrub oak brush.

Asc.gently.

12.50 Leave valley, bears NE and SW.

Enter scattering timber and dense mahogany brush, bears
NE and SW.

Asc.abruptly.

18.00 Top of spur, 100 ft. above valley, bears E. and W.
Desc.

23.00 Bottom of hollow, 75 ft. below spur, course SE.
Asc.

39.50 Prominent granite butte 50 ft. high and about 50 ft.sq.
bears W. 25 lks.dist.

40.56 Fall 9 lks.East of the $\frac{1}{2}$ sec.cor.bet.secs. 11 and 12,

Retracement Subdivision of T.33 S., R.7 W.-Continued.

Chains

which is a volcanic stone, 10x10x8 ins., above ground, firmly set, and mkd. and witnessed as described by the surveyor general. The stone is greatly decayed; therefore I destroy the old cor. and re-establish it in the same place as follows:

Set an iron post, 3 ft. long 1 in. dia., 26 ins. in the ground, for 1/2 sec. cor., mkd. on brass cap $\frac{1}{2}$ S 11 in W half and S 12 in E half; from which

A mahogany, 5 ins. dia., bears S.78°E., 7 lks.

dist.. mkd. $\frac{1}{2}$ S 12 B T.

A mahogany, 8 ins. dia., bears N.80°W., 17 lks.

dist.. mkd. $\frac{1}{2}$ S 11 B T.

45.00 Top of spur, 200 ft. above hollow, bears NE and SW.

Desc.

49.50 Head of swale, 10 ft. below spur, course SE.

Asc.

51.00 Top of ridge, 100 ft. above swale, bears NW and SE.

Desc.

55.00 Head of hollow, 20 ft. below ridge, course E.

Asc.

60.00 Top of main ridge, 75 ft. above hollows, bears NE and SW.

Desc.

65.00 Head of Cottonwood canon, 150 ft. below ridge, course W.

Asc.

77.96 Fall 18 lks. East of the cor. of secs. 1, 2, 11, and 12, which is a sandstone, 9x10x8 ins., above ground, firmly set, and mkd and witnessed as described by the surveyor general.

The stone is badly disintegrated therefore I destroy the old cor. and re-establish it in the same place as follows.

Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground, for cor. of secs. 1, 2, 11, and 12, mkd. on brass cap

T 33 S S 2 in NW.

R 7 W S 1 in NE.

S 12 in ESE.; and

S 11 in SW. quadrants; from which

Retracement Sub.T.33 S., R.7 W.-Continued.

Chains

A mahogany 4 ins.dia., bears N. 36° E., 6 lks.

dist..mkd.T.33 S R 7 W S 1 B T.

A mahogany 4 ins.dia., bears S. 68° E., 37 lks.

dist..mkd.T 33 S R 7 W S 12 B T.

A mahogany 6 ins.dia., bears S. 46° W., 74 lks.

dist..mkd.T 33 S R 7 W S 11 B T.

A mahogany 7 ins.dia., bears N. 79° W., 38 lks.

dist..mkd. T 33 S R 7 W S 2 B T.

The course of this line is therefore N. $0^{\circ}08'$ W., 77.96 chs.

S.12.50 chs.in Upper Bear Valley nearly level;soil rich black loam from 12 to 18 ins.deep, but too rocky to be cultivated except in small patches.No timber.Undergrowth, sage brush and scrub oak.A little grass .N. 65.46 chs.is over rough mountainous land with steep slopes and very rocky.Soil,sandy and clay about 8 ins.deep, on rock and clay subsoil.Timber,scattering cedar and pinon pine .Undergrowth,mahogany and oak and sage brush.

Mountainous land,or land covered with denseundergrowth, 77.96 chs.

September 23.1910:At this cor.I set off $0^{\circ}04'$ N.,on the decl.arc;and at 11 h 53 m a.m.,l.m.t.,I observe the sun on the meridian the resulting lat.is $37^{\circ}58'N$..,which is the proper lat.nearly.

N. $0^{\circ}15'E.$,on a retracement line betsecs.1 and 2.

Over mountainous land;through dense undergrowth and scattering timber .

Asc..

3.75 Top of spur,100 ft.above canon,bears N. 70° W.and S. 70° E.

Desc..

5.00 Head of hollow,100 ft.below spur,course W.

Asc..

Retracement Sub.T.33 S., R.7 W.-Continued.

Chains

15.00 Top of spur, 50 ft. above hollow, bears NW and SE.

Desc.

20.50 Bottom of hollow, 75 ft. below spur, course W.

Asc.

25.50 Top of spur, 50 ft. above hollow, bears E. and W.

42.90 Fall 41 lks. East of the $\frac{1}{4}$ sec.cor. bet. secs. 1 and 2, which is a granite stone, 7x9x7 ins., above ground, firmly set in and mkd. and witnessed as described by the surveyor general; The cor. stone is poorly mkd. and I therefore destroy the old cor. and re-establish it in the same place as follows:

Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for $\frac{1}{4}$ sec.cor.. mkd. on brass cap $\frac{1}{4}$ S 2 in W half and S 1 in E half; from which

A mahogany 4, 1¹/₂ ins. dia., bears S.88°E., 70 lks.

dist.. mkd. $\frac{1}{2}$ S 1 B T.

A mahogany, 7 ins. dia., bears S.15°W., 19 lks.

dist.. mkd. $\frac{1}{4}$ S 2 B T.

48.00 Bottom of hollow, 50 ft. below spur, course S.60°W.

Creek $\frac{1}{2}$ lks. wide in bottom . Asc.

55.50 Top of spur, 150 ft. above hollow, bears NE and SW.

Desc.

79.50 Creek, 1 lk. wide, $\frac{1}{2}$ in. deep, in bottom of hollow, 75 ft. below spur, course W.

Asc.

86.38 Fall 167 lks. East of the cor. of secs. 1, 2, 35, and 36, on N.bdy. of Tp., heretofore described.

The course of the south half of this mile is therefore N.0°33'W., 42.90 chs. and the north half is N.1°40'W.,

43.50 chs.

Land, mountainous .

Soil, clay and gravelly loam about 12 ins. deep, on clay subsoil.

Timber, cedar and pinon pine.

Undergrowth, mahogany and oak and sage brush.

Retracement Sub.T.33 S., R.7 W.-Continued.

Chains	Good grass .
86.40	Mountainous land, or land covered with dense undergrowth, chs.
	September 23, 1910.
	September 20, 1910: At 7h 54 m a.m., l.m.t., I set off 37° 55' N., on the lat.arc; 1°18' N., on the decl.arc; and determine a meridian with the solar at the cor.of secs. 26, 27, 34, and 35., heretofore described .
	Thence I run
	For reasons already explained.
	South, on a retracement line bet.secs.34 and 35.
	Over nearly level land; in upper Bear Valley; through dense sage and buck brush .
	Asc.gently.
1.50	Leave valley, bears NE and SW.
	Enter scattering timber, bears NE and SW.
	Asc.
25.50	Top of ridge, 150 ft. above cor., bears E. and W.
	Desc.along West slope of Little Creek Greek mountain.
39.70	Fall 12 lks.W.of the 4 sec.cor., bet.secs.34 and 35, which is a granite stone, 7x10x5 ins., above ground, firmly set, and mkd.and witnessed as described by the surveyor general.
55.00	Begin more abrupt descent, bears NW and SE.
79.25	Fall 23 lks.West of the cor.of secs.34 and 35, which is granite 12x7x5 ins., above ground, firmly set, and mkd.and witnessed as described by the surveyor general.
	The course of this mile is therefore S, 0°10' E. 79.25 chs.
	Land, mountainous.
	Soil, rocky ; 3rd rate.
	Timber, cedar, pinon pine, red pine and white pine.

Retracement Subdivision T.33 S., R.7 W.-Continued.

Chains

Undergrowth, oak, mahogany, service berry, and sage brush.

Good grass for grazing.

Mountainous land, or land covered with dense undergrowth,
79.25 chs.

September 20, 1910: At this cor. I set off 1°14' N., on the
decl. arc; and at 11 h 54 m a.m., l.m.t., I observ^e the sun on
the meridian the resulting lat. is 37°54' N., which is the
proper lat. nearly.

From the cor. of secs. 26, 27, 34, and 35, heretofore described

I run

East, on a retracement line bet. secs. 26 and 35.

Over nearly level land in Upper Bear Valley; through dense
sage, oak, and buck brush.

Asc.

2.00 Leave valley, bears N.70°E. and S.70°W.

Asc. more abruptly.

15.00 Commence more abrupt ascent, bears NE and SW.

24.00 Enter volcanic rock slide, bears N. and S.

29.00 Leave rock slide, bears N. and S.

35.00 Enter dense mahogany undergrowth, bears N. and S.

38.00 Top of ridge, 700 ft. above cor., bears N.20°E. and S.20°W.

Desc.

39.80 Intersect $\frac{1}{4}$ sec. cor. bet. secs. 26 and 35, which is a sandstone,

9x9x10 ins. above ground, firmly set, and mkd. as described
by the surveyor general. The bearing trees have been cut
down and only the stumps remain. I destroy the old cor.
and re-establish it in the same place as follows:

Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the
ground, for $\frac{1}{4}$ sec. cor.. mkd. on brass cap $\frac{1}{4}$ S 26 in N half
and S 35 in S half; from which

A mahogany 10, ins. dia., bears N.89°E., 5 lks.

dist.. mkd. $\frac{1}{4}$ S 26 B T.

Retracement Sub.T.33 S., R.7 W.-Continued.

Chains

- A mahogany 8 ins.dia., bears S.61°W., 23. lks.
dist..mkd. $\frac{1}{4}$ S 35 B T. ✓
- 49.00 Leave mahogany, bears N.and S.
Enter heavy red pine, white pine, and aspen timber, bears
N.and S.
Desc.abruptly, bears N.and S.
- 56.00 Leave heavy and enter scattering timber, bears N.and S.
Enter dense oak, service berry, wild apple, and larb brush,
bears N.and S.
- 62.75 Creek, 3 lks.wide, 6 ins.deep, in bottom of canon, 400 ft.
below ridge, course N.15°W.
- 80.40 Fall 29 lks.S.of the cor.of secs.25,26,35, and 36, which is
a conglomerate stone, 7x9x9 ins., above ground, firmly set,
and mkd.and witnessed as described by the surveyor general.
The cor.is greatly decayed; therefore I destroy the old
cor.and re-establish it in the same place as follows:
Set an iron post, 3 ft.long, 2 ins.dia., 24 ins.in the
ground, for cor.of secs.25,26,35, and 36,mkd.on brass cap
T 33 S 8 26 in NW.
R 7 W S 25 in NE.
S 36 in SE.; and
S 35 in SW.quadrants; from which
A mahogany 5 ins.dia., bears N.56°E., 7 lks.
dist..mkd.T 33 S R 7 W S 25 B T.
A white pine 5 ins.dia., bears S.55°E., 15 lks.
dist..mkd.T 33 S R 7 W S 35 B T.
A balsam 6 ins.dia., bears S.26°W., 13 lks.
dist..mkd.T 33 S R 7 W S 35 B T.
A white pine, 5 ins.dia., bears N.78°W., 11 lks.
dist..mkd.T 33 S., R.7 W S 26 B T. ✓
The west half of this mile is therefore East 39.80 chs.
and the east half is N.89°35'E., 40.60 chs.
Land, on W.2.00 chs.is nearly level valley, soil, rich loam
3 ft.deep, subsoil clay and gravel.No timber.Undergrowth,
sage oak and buck brush.Good grass.

Retracement Subdivision T.33 S., R.7 W.-Continued.

Chains E.78.40 chs.is rough and steep mountain slopes, almost too steep to be used for grazing purposes. Soil, rich loam well mixed with gravel and rock. Subsoil gravel. Timber, red pine, white pine, balsam, and aspen. Undergrowth, mahogany, oak, service berry, sage brush, larch, and wild apple. Good grass for grazing.

Mountainous or heavily timbered land, or land covered with dense undergrowth, 80.40 chs..

September 20, 1910.

September 21, 1910: At 7 h 53 m a.m., l.m.t., I set off 37° 55' N., on the lat.arc; 0° 55' N., on the decl.arc; and determine a meridian with the solar, at the cor.of secs. 25, 26, 35, and 36.

Thence, I run

East, on a retracement line bet.secs. 25 and 36.

Over mountainous land, through scattering timber and dense undergrowth.

Asc.

2.00 Top of ridge, 500 ft. above canon, bears NE and SW.

Desc.

30.00 Bottom of hollow, 150 ft. below ridge, course N. 50° E. A creek 1 lk. wide in bottom. Asc.

36.00 Enter heavy aspen timber and leave undergrowth, bears N. and S.

37.50 Creek 1 lks. wide, $\frac{1}{2}$ in. deep, course N.

38.00 Leave timber and enter dense undergrowth, bears N. and S.

40.20 Fall 12 lks. S. of the $\frac{1}{2}$ sec.cor.. bet.secs. 25 and 36. which is a sandstone, 8x8x7 ins., above ground, firmly set, and mkd. and witnessed as described by the surveyor general. The cor. is partly decayed therefore I destroy the old cor. and re-establish it in the same place as follows:

Retracement Sub.T.33 S., R.7 W.-Continued.

Chains

Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for $\frac{1}{4}$ sec.cor.. mkd.on brass cap $\frac{1}{4}$ S 25 in N half and S 36 in S half; raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, N. of cor.

42.00 Top of spur, 50 ft. above hollow, bears N.20°E. and S.20° W.

Desc.

72.00 Leave mahogany, oak, and buck brush and enter dense sage brush, bears N. and S.

80.95 Fall 47 lks.S. of the cor.of secs.25,30,31, and 36, on E. bdy.of Tps. which is a conglomerate stone, 11x7x7 ins., above ground, firmly set, and mkd.and witnessed as described by the surveyor general. The stone is partly decayed therfore I destroy the old cor. and re-establish the cor.in the same place as follows:

Set an iron post, 3 ft. long, 3 ins. in dia., 24 ins. in the ground, for cor.of secs.25,30,31, and 36, mkd.on brass cap

T 33 S in N half.

R 7 W S 25 in NW.

R 6 W S 30 in NE.

S 31 in SE.; and

S 36 in SW.quadrants; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.

The course of the west half of this line is therefore

N.89°50'E., 40 20 chs. and the east half is N.89°30'E., 40.75 chs.

Land, mountainous and slopes are somewhat gradual. Soil, black loam, rich, and moist, mixed with considerable rock. Subsoil gravel and clay. Timber, pine and aspen. Undergrowth oak, mahogany, service berry, buck brush and sage brush. Mountainous or heavily timbered and, or land covered with dense undergrowth, 80.95 chs.

September 21, 1910.

John P. Stewart
Instrumentman G.I.O.

Subdivision of T.33 S., R.7 W.

Chains

Survey commenced September 22, 1910, and executed with a W. and L.E. Gurley Explorer's transit, No. 957, with solar attachment. The horizontal limb is provided with two double verniers placed opposite to each other, reading to single minutes of arc; which is also the least count of verniers of the latitude and declination arcs.

The instrument was examined, tested on the meridian at Salt Lake City, found correct, and was approved by the surveyor general for Utah, on August 6, 1910.

Note: For complete test of instrument see notes of Re-tracement south bdy. T.33 S., R.7 W.

At 2 h 53 m p.m., l.m.t., I set off $37^{\circ}55'N.$, on the lat. arc; $0^{\circ}25'N.$, on the decl. arc; and determine a meridian with the solar, at the cor. of secs. 25, 26, 35, and 36, here-tofore described.

Thence I run

$E.0^{\circ}1'E.$, on a random line bet. secs. 35 and 36.

40.00 Set temp. $\frac{1}{2}$ sec. cor.

79.45 Intersect S. bdy. of Tp., 4.86 chs. West of the $\frac{1}{4}$ sec. cor. on N. bdy. sec. 2, T.34 S., R.7 W., which is a trachyte stone, 9x10x8 ins., above ground, firmly set, and mkd. and witnessed as described by the surveyor general.

Set an iron post, 3 ft. long, 2 ins. in dia., 20 ins. in the ground, on bed rock, and surrounded by mound of earth and stone, for closing cor. of secs. 35 and 36, mkd. on brass cap

C CT 34 S R 7 W S 2 in S half.

T 33 S S 35 in NW.; and

R 7 W S 36 in NE. quadrants; from which

A red pine, 12 ins. dia., bears N. $21^{\circ}E.$, 164 lks.

dist.. mkd. T 33 S R 7 W S 36 B T.

A red pine, 14 ins. dia., bears N. $76^{\circ}W.$, 97 lks.

dist.. mkd. T 33 S R 7 W S 35 B T.

Thence I run

$N.0^{\circ}1'W.$, on a true line bet. secs. 35 and 36.

Subdivision T.33 S., R.7 W. -Continued.

Chains	Over mountainous land; through heavy red pine, white pine, and balsam timber and scattering mahogany and buck brush.
	Asc.
9.00	Top of ridge, 100 ft. above cor., bears E. and W.
	Desc.
18.00	Leave timber, bears E. and W.
	Enter dense undergrowth, bears E. and W.
23.00	Bottom of hollow, 200 ft. below ridge, course E.
	Asc. over volcanic ledges.
35.50	Top of ridge, 300 ft. above hollow, bears E. and W.
	Leave ledges, bears E. and W.
	Desc.
37.00	Enter heavy pine and balsam timber, bears NE and SW.
39.45	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for $\frac{1}{2}$ sec. cor.. mkd. on brass cap $\frac{1}{4}$ S 35 in W half and S 36 in E half; from which
	A red pine, 8 ins. dia., bears N. 66° E., 31 lks. dist.. mkd. $\frac{1}{4}$ S 36 B T.
	A red pine, 7 ins. dia., bears S. 37° W., 11 lks. dist.. mkd. $\frac{1}{2}$ S 35 B T.
39.75	Leave timber, bears E and W.
43.00	Enter standing dead timber, bears E. and W.
44.00	Top of black volcanic ledge, 30 ft. high, bears E. and W.
62.00	Leave dead timber and enter live pine and balsam (heavy), bears NE and SW.
70.00	Bottom of hollow, 500 ft. below ridge, course E.
	Leave heavy and enter scattering timber, bears E. and W.
	Enter dense mahogany undergrowth, bears E. and W.
	Asc.
77.60	Top of ridge, 75 ft. above hollow, bears NE and SW.
	Desc.
79.45	The cor. of secs. 25, 26, 35, and 36.
	Land, on northeast slope of Little Creek Mountain, slopes steep and rocky. Soil rich loam but only from 2 to 12 ins. deep. on solid rock. Timber, pine and balsam. Undergrowth,

Subdivision of T.33-S., R.7 W.-Continued.

Chains

mahogany, buck brush, oak, and sage brush. Good grass.
Mountainous or heavily timbered land, or land covered
with dense undergrowth. 79.45 chs.

September 22, 1910.

John R. Stewart
Instrumentman G.L.O.

Survey commenced September 26, 1910, and executed with a Young and Sons light mountain No. 7382, with solar attachment. The horizontal limb is provided with two double verniers placed opposite to each other, reading to single minutes of arc; which is also the least count of the verniers of the latitude and declination arcs. The instrument was examined, tested on the meridian at Salt Lake City, found correct, and was approved by the Surveyor general for Utah, on August 6, 1910.

I examine the adjustments of the instrument and correct the level and collimation errors; then, to test the solar apparatus by comparing its indications resulting from solar observations made during p.m. and a.m. hours with a meridian established by Polaris observation, I proceed as follows:

At the cor. of secs. 10, 11, 14, and 15, heretofore described, latitude $37^{\circ}57'19''$ N., longitude $112^{\circ}35'24''$ W., I set off $37^{\circ}57'19''$ N., on the lat. arc; $1^{\circ}09'$ E., on the decl. arc; and at 4 h 52 p.m., l.m.t., I determine a meridian with the solar, and mark a point thereof on a stone firmly set in the ground, 5.00 chs. N. of the cor.

At 7 h 13 m p.m., l.m.t., I observe Polaris at eastern elongation, in accordance with the Manual, and mark a point in the line thus determined by a tack driven in a wooden plug set in the ground, 5.00 chs. N. of the cor.

September 26, 1910.

Subdivision of T.33.S., R.7.W.-Continued.

Chains

September 27, 1910: At 7 h 30 m a.m., l.m.t., I lay off the azimuth of Polaris $1^{\circ}29.4'$ to the west, and mark a point in the meridian thus determined, by cutting a small groove in the stone already set 5.00 chs.N.of the cor.; this mark falls 0.28 ins.east of the meridian established by the solar.

At 7 h 51 m a.m., l.m.t., I set off $37^{\circ}57'N.$, on the lat.arc; $1^{\circ}25'S.$, on the decl.arc; and mark the meridian determined with the solar, by a cross on the stone already set 5.00 chs.N.of the cor.; this mark falls 0.32 ins.east of the meridian established by Polaris observation; The solar apparatus by p.m.and a.m. observations defines positions for meridians respectively about $0'15''$ west and $0'17''$ east of the meridian established by Polaris observation; therefore I conclude that the adjustments of the instrument are satisfactory.

The mag.decl.at 8 h 30 m a.m., is $N.15^{\circ}57'W.$, the angle thus determined gives the mag.decl. $15^{\circ}57'E.$

From the cor.of secs.10,11,14, and 15, heretofore described I run

North, on a random line bet.secs.10 and 11.

40.00 Set temp. $\frac{1}{2}$ sec.cor.

80.00 Set temp.cor.of secs.2,3,10, and 11.

Thence I run

East, on a random line bet.secs.2 and 11.

40.00 Set temp. $\frac{1}{2}$ sec.cor.

78.76 Intersect N.and S.line, 12 lks.Sof the cor.of secs.1,2, 11, and 12, heretofore described.

Thence I run

$S.89^{\circ}55'W.$, on a true line bet.secs.2 and 11.

Over mountainous land; through heavy timber and scattering

Subdivision of T.33.S., R.7.W.-Continued.

Chains	
	undergrowth.
	Desc.
9.50	Bottom of hollow, 100 ft. below sec.cor., course S.55°W.
	Asc.
15.00	Top of spur, 50 ft. above hollow, bears NE and SW.
	Desc.
16.50	Bottom of hollow, 25 ft. below spur, course SW.
	Asc.
19.00	Top of spur, 25 ft. above hollow, bears NE and SW.
	Desc.
26.00	Leave timber and mahogany undergrowth, bears NE and SW.
	Enter dense sage brush, bears NE and SW.
31.00	Enter heavy aspen timber, bears N. and S.
32.10	Cottonwood Creek, 6 lks. wide, 4 ins. deep, in Cottonwood canon, 150 ft. below spur, course N.30°W.
	Asc.
35.00	Leave aspen timber and sage brush, bears N.W and SE.
	Enter scattering cedar and pinon pine timber and mahogany undergrowth, bears NW and SE.
36.50	Top of spur, 100 ft. above canon, bears NE and SW. ✓
	Desc.
40.00	Set an iron, 3 ft. long, 1 in. dia., 26 ins. in the ground, for $\frac{1}{2}$ sec.cor.. mkd. on brass cap $\frac{1}{4}$ S 2 in N half and S 11 in S half; from which
	A pinon pine, 12 ins. dia., bears N.60°W., 42 lks. dist.. mkd. $\frac{1}{4}$ S 2 B T.
	A pinon pine, 14 ins. dia., bears S.15°E., 45 lks. dist.. mkd. $\frac{1}{4}$ S 11 B T. ✓
45.00	Bottom of hollow, 50 ft. below spur, course N.20°E.
	Asc.
52.00	Top of spur, 75 ft. above hollow, bears NE and SW.
	Leave timber, bears NE and SW.
	Desc. through scattering oak and dense buck brush.
71.00	Enter choke cherry brush, bears NE and SW.
72.00	Bottom of hollow, 100 ft. below spur, course W.

Subdivision of T.33 S., R.7 W.-Continued.

Chains	
78.20	Top of ridge, 40 ft. above hollow, bears N.30°E. and S.30°W.
Desc.	
78.76	Intersect temp.cor. Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground, for cor. of secs. 2, 3, 10, and 11, mkd. on brass cap T 33 S S 3 in NW. R 7 W S 2 in NE. S 11 in SE.; and S 10 in SW. quadrants; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. Land, mountainous, slopes are somewhat rolling and either covered with heavy timber or dense undergrowth and in places both. Soil is rich black loam about 2 ft. deep mixed with rock and gravel. Mountainous or heavily timbered land, or land covered with dense undergrowth, 78.76 chs.
September 27, 1910:	At this cor. I set off 1°30'S., on the decl. arc; and at 11 h 51 m a.m., l.m.t., I observe the sun on the meridian the resulting lat. is 37°58'N., which is the proper lat. nearly.
Asc.	
South, on a true line bet. secs. 10 and 11.	
Over mountainous land; through dense mahogany and oak brush.	
Asc.	
2.50	Top of spur, 50 ft. above cor., bears N.20°E. and S.20°W.
Desc.	
15.00	Bottom of hollow, 100 ft. below spur, course N.30°E.
Leave dense dense oak brush, bears NE and SW.	
Asc.	
30.00	Leave mahogany, bears E. and W.
40.00	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the

Subdivision of T.33 S., R.7 W.-Continued.

- Chains ground, on bed rock, and surrounded by mound of earth and stone, for $\frac{1}{4}$ sec. cor.. mkd. on brass cap $\frac{1}{4}$ S 10 in W half and S 11 in E half; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.
- 43.00 Top of ridge, 200 ft. above hollow, bears N.20°E. and S.20°W.
Desc. through mahogany brush.
- 46.00 Head of hollow, 40 ft. below ridge, course NE.
Asc.
- 53.00 Top of ridge, 60 ft. above hollow, bears E. and W.
Desc.
- 63.00 Head of hollow, 100 ft. below ridge, course SW.
Asc.
- 67.00 Top of spur, 50 ft. above hollow, bears N.30°E. and S.30°W.
Desc.
- 78 00 Bottom of hollow, 50 ft. below spur, course S.30°W.
Asc.
- 80.00 The cor. of secs. 10, 11, 14. and 15.
Land, mountainous, steep slopes, very brushy.
Timber, cedar and pinon pine.
Undergrowth, oak, sage, and mahogany.
Good grass for grazing.
Mountainous land, or land covered with dense undergrowth.
80.00 chs.
-
- Note: Knowing from retracement of N.bdy. of Tp. that this line will not close within limits;
I run
North, on a true line bet. secs. 2 and 3.
Over mountainous land; through dense undergrowth.
Desc.
- 2.80 Creek, 1 lk. wide, 1 in. deep, in bottom of hollow, 100 ft. below sec.cor., course N.70°E.

Subdivision of T.33 S. R.7 W.-Continued.

Chains	Asc.
15.00	Top of spur, 150 ft. above hollow, bears E. and W.
	Desc.
36.00	Bottom of hollow, 300 ft. below spur, course E.
	Asc.
40.00	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor. mkd. on brass cap $\frac{1}{4}$ S 3 in W half and S 2 in E half; from which A mahogany, 6 ins. dia., bears N. 80° E., 33 lks. dist.. mkd. $\frac{1}{4}$ S 2 B.T.
	A mahogany, 10 ins. dia., bears N. 73° W., 90 lks. dist.. mkd. $\frac{1}{4}$ S 3 B.T.
40.50	Top of spur, 100 ft. above hollow, bears E. and W.
	Desc.
47.20	Creek, 3 lks. wide, $\frac{1}{2}$ in. deep, in bottom of Cottonwood canon, 400 ft. below spur, course N. 60° W. Enter heavy cottonwood timber, bears NW and SE.
54.00	Leave cottonwood timber, bears NW and SE. Enter dense sage brush and scattering oak brush, bears NW and SE.
64.50	Mouth of hollow, course SW. Creek 1 lk. wide in bottom. Continue ascent.
73.00	Leave tak brush and enter heavy cedar and pinon pine timber, bears E. and W.
84.11	Intersect N. bdy. of Tp., 5.69 chs. N. $88^{\circ}22'$ E., of the cor. of secs. 2, 3, 34, and 35, heretofore described. Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground, for closing cor. of sec. 2 and 3, mkd. on brass cap C C T 32 S.R 7 W S 34 S 35 in N. half. R 7 W S 2 in SE.; and T 33 S S 3 in SW. quadrants; from which A pinon pine, 10 ins. dia., bears S. $38^{\circ}30'$ E., 104 lks. dist.. mkd. T 33 S R 7 W S 2 B.T. A cedar, 14 ins. dia., bears S. 25° W., 191 lks. dist.. mkd. T 33 S R 7 W S 3 B.T.

Subdivision of T.33 S., R.7 W.-Continued.

Chains Note:I destroy all marks on the cor.of secs.2,3,34, and 35, which pertain to secs.2 and 3.

Land, mountainous steep slopes and rocky.S.47.20 chs.

drains NE. into Cottonwood canon. and the N.36.91 chs.

drains southwesterly into Cottonwood canon.

Soil, rich black loam from 2 to 6 ft. deep, subsoil clay.

Timber, cedar and pinon pine.

Undergrowth, oak, mahogany, and sage brush.

Good grass for grazing.

Mountainous or heavily timbered land, or land covered with dense undergrowth, 84.11 chs.

September 27, 1910.

September 16, 1910: At 9 h 55 m a.m., l.m.t., I set off 37° 56' N., on the lat.arc; 2° 49' N., on the decl.arc; and determine a meridian with the solar at the cor.of secs. 15, 16, 21, and 22. heretofore described.

Thence I run

North, on a random line bet.secs. 15 and 16.

40.00 Set temp. $\frac{1}{4}$ sec.cor.

80.00 Set temp.cor. of secs. 9, 10, 15, and 16.

Thence I run

East, on a random line bet.secs. 10 and 15.

40.00 Set temp. $\frac{1}{4}$ sec.cor.

79.88 Intersect N. and S.line, at the cor.of secs. 10, 11, 14, and 15.

Thence I run

West, on a true line bet.secs. 10 and 15.

Over mountainous land; through dense undergrowth.

Desc.

2.20 Bottom of hollow, 20 ft. below cor., course SW.

Asc.

7.20 Top of spur, 100 ft. above hollow, bears N.40°E. and S.40°W.

Subdivision of T.33 S., R.7 W.-Continued.

Chains	
	Desc.
13.00	Bottom of hollow, 150 ft. below ridge, course S.25°W.
	Asc.
15.00	Top of spur, 50 ft. above hollow, bears N.20°E. and S.20°W.
	Desc. abruptly.
19.10	Bottom of hollow, 150 ft. below spur, course S.20°W.
	Asc.
39.94	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor.. mkd. on brass cap $\frac{1}{4}$ S 10 in N half and S 15 in S half; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, N. of cor.
51.50	Top of ridge, 300 ft. above hollow, bears N.30°E. and S.30°W.
	Desc.
61.00	Bottom of hollow, 140 ft. below ridge, course SW.
	Asc.
64.00	Top of spur, 50 ft. above hollow, bears NE and SW.
	Desc.
67.00	Bottom of hollow, 60 ft. below spur, course SW.
	Asc.
79.88	Point 250 ft. above hollow, Intersect temp. cor. Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground, for cor. of secs. 9, 10, 15, and 16, mkd. on brass cap T 33 S S 9 in NW. R 7 W S 10 in NE. S 15 in SE.; and S 16 in SW. quadrants; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. Entire mile over steep slopes draining southward; there are numerous patches of volcanic rock or slides in which there is no soil; otherwise the soil is rich loam, about 1 ft. deep, subsoil rock. Timber, cedar and pinon pine. Undergrowth, sage, oak, and buck brush. Good grass in patches. Mountainous land, or land covered with dense undergrowth,

Subdivision of T.33 S., R.7 W.-Continued.

Chains

79.88 chs.

September 16, 1910: At the noon hour the sky is overcast and solar observations are impossible.

South, on a true line bet. secs. 15 and 16.

Over mountainous land; through dense undergrowth.

Desc.

31.75 Bottom of hollow, 400 ft. below cor., course SW.

Asc.

40.00 Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for $\frac{1}{2}$ sec. cor.. mkd. on brass cap $\frac{1}{2}$ S 16 in W half and S 15 in E half; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. ✓

43.20 Top of spur, 100 ft. above hollow, bears NE and SW.

Desc.

48.30 Bottom of hollow, 100 ft. below ridge, course SW.

Asc.

56.10 Top of spur, 50 ft. above hollow, bears E. and W.

Desv.

80.00 The cor. of secs. 15, 16, 21, and 22.

Land, mountainous, steep slopes covered with loose rock volcanic and shales. Soil, clay, hard and dry about 10 ins. to 16 ins. deep; subsoil, clay and rock.

Timber, a few scattering cedars and pinon pine.

Undergrowth, oak, service berry, mahogany and sage brush.

A very little grass.

Mountainous land, or land covered with dense undergrowth,

80.chs.

John R Stewart
Instrumentman, G.L.O.

Subdivision of T.33 S., R.7 W.-Continued.

Chains

September 28, 1910: At 7 h 51 m a.m., l.m.t., I set off 37° 57' N., on the lat.arc; 1° 49' S., on the decl.arc; and determine a meridian, with the solar, at the cor.of secs. 9, 10, 15, and 16, heretofore described.

Thence I run

N.0°1'W., bet. secs. 9 and 10.

Over mountainous land; through dense sage oak and service berry undergrowth.

Asc.

27.50 Top of ridge, 300 ft. above cor., bears N.65°W. and S.65°E.

Desc.

27.80 Enter dense aspen saplings and leave other kinds of undergrowth, bears NW and SE.

32.90 Leave saplings and enter dense oak and buck brush, bears NW and SE.

40.00 Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for $\frac{1}{4}$ sec.cor.. mkd.on brass cap $\frac{1}{2}$ S 9 in W half and S 10 in E half; dig pits, 18x18x12 ins., N. and S. of post 3 ft. dist.; and raise a mound of earth, $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high, W of cor.

44.00 Enter aspen saplings, bears E. and W.

48.00 Leave aspen saplings, bears E. and W.

61.00 Enter aspen saplings, bears E. and W.

76.00 Bottom of swale, 250 ft. below ridge, course N.20°W.

Asc.

Leave aspen saplings, bears N.20°W. and S.20°E.

80.00 Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground, for cor.of secs. 3, 4, 9, and 10, mkd.on brass cap T 33 S S 4 in NW.

R 7 W S 3 in NE.

S 10 in SE.; and

S 9 in SW.quadrants; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.

S.27.50 chs. Steep south slope of mountain, very brush.

Subdivision of T.33 S., R.7 W. Continued.

Chains

Soil sandy clay, loose and rich about 2 ft. deep, but there are numerous small beds of volcanic rock, or slides in which there is no soil nor vegetation. Undergrowth, oak, sage brush, service berry, and mahogany. patches of grass.
 N.52.50 chs. is on north slope of high ridge, gentle slope draining into Cottonwood Canon. Soil rich clay loam with some gravel. subsoil clay. Undergrowth, oak and buck brush and aspen saplings. No timber.
 Mountainous land, or land covered with dense undergrowth, 80.00 chs.

East, on a random line bet. secs. 3 and 10.

40.00 Set temp. $\frac{1}{4}$ sec. cor.

79.80 Intersect N. and S. line, 19 lks. S. of the cor. of secs. 2, 3, 10, and 11.

Thence I run

S.89°52'W., on a true line bet. secs. 3 and 10.

Over mountainous land; through dense undergrowth!

Desc.

5.20 Bottom of hollow, 100 ft. below cor., course N.5°E.

Asc.

17.30 Top of ridge, 50 ft. above swale, bears N.40°W. and S.40°E.

Desc.

37.00 Bottom of canon, 90 ft. below ridge, course NW.

Asc.

39.90 Set an iron pst, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor.. mkd. on brass cap $\frac{1}{4}$ S 3 in N half and S 10 in S half; from which

A balsam, 5 ins. dia., bears N.6°E., 28 lks.

dist.. mkd. $\frac{1}{4}$ S 3 B T.

A mahogany, 10 ins. dia., bears S.86°E., 39 lks.

dist.. mkd. $\frac{1}{4}$ S 10 B T.

Subdivision of T.33 S., R.7 W.-Continued.

Chains	
62.50	Top of spur, 300 ft. above canon, bears N.20°W. and S.20°E. Desc. abruptly.
79.80	The cor. of secs. 3, 4, 9, and 10, 150 ft. below spur. Land, mountainous, long smooth slopes, covered with dense oak, service berry, choke cherry, and mahogany. Soil, sandy loam, gravelly subsoil. A few scattering pine and balsam trees. Good grass for grazing. Mountainous land, or land covered with dense undergrowth, 79.80 chs.
	September 88, 1910: At this cor. I set off 1°53'S., on the decl. arc; and at 11 h 51 m a.m., l.m.t., I observe the sun on the meridian, the resulting lat. is 37°58'N., which is the proper lat. nearly.
	For reasons already explained I run N.0°1'W., on a true line bet. secs. 3 and 4. Over mountainous land; through dense sage and oak brush. Asc. .
23.40	Top of ridge, 60 ft. above cor., bears NW and SE. Desc. abruptly.
40.00	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor.. mkd. on brass cap $\frac{1}{4}$ S 4 in W half and S 3 in E half; dig pits, 18x18x12 ins., N. and S. of post, 3 ft. dist.; and raise a mound of earth, $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high, W. of cor.
43.30	Bottom of hollow, 125 ft. below ridge, course NW. Asc. .
61.00	Enter heavy cedar and pinon pine timber, bears E. and W. Leave dense and enter scattering undergrowth, bears E. and W.
64.00	Top of spur, 35 ft. above hollow, bears N.20°W. and S.20°E. Desc. .
68.00	

Subdivision of T.33 S., R.7 W.-Continued.

Chains

82.00 Bottom of hollow, 175 ft. below spur, course NW.

Asc.

84.12 Intersect N.bdy.of Tp., 658 lks.N.89°44'E., of the cor.

of secs.3,4,33, and 34, heretofore described.

Set an iron post, 3 ft. long, 2 ins.in dia., 24 ins.in the ground, for closing cor.of secs.3 and 4, mkd.on brass cap

C C T 33 S R 7 W S 33 S 34 in N half.

R 7 W S 3 in SE.; and

T 33 S S 4 in SW.quadrants; from which

A cedar, 16 ins.dia., bears S.58°E., 36 lks.

dist..mkd.T 33 S R 7 W S 3 B T.

No other trees within limits; and raise a mound of stone, 2 ft.base, 1 $\frac{1}{2}$ ft.high, S.of cor.

Note; I destroy all marks on the cor.of secs.3,4,33, and 34 which pertain to secs.3 and 4. ✓

Land, high rolling ridges and hollows. Slopes and drains northwesterly. Soil, black rich loam soft texture, moist. gravelly subsoil. S.61.00 chs. covered with dense oak, sage and mahogany undergrowth. N.19.00 chs. covered with heavy cedar and pinon pine and scattering sage and oak brush. Good grass for grazing.

Mountainous or heavily timbered land, or land covered with with dense undergrowth, 84.12 chs.

September 28, 1910.

Dunby Stuart
Instrumentman, G.L.O.

September 17, 1910: At 7 h 55 m a.m., l.m.t., I set off 37°56' N., on the lat.arc; 2°28' N., on the decl.arc; and determine a meridian with the solar, at the cor.of secs.20,21,28, and 29 heretofore described.

Thence I run

Subdivision of T.33 S., R.7 W.-Continued.

Chains

North, on a random line bet. secs. 20 and 21.

40.00 Set temp. $\frac{1}{4}$ sec.cor.

80.00 Set temp.sec.cor.

Thence I run

S.89°53'E., on a random line bet. secs. 16 and 21.

40.00 Set temp. $\frac{1}{4}$ sec.cor.

80.00 Intersect N. and S. line, 7 lks. N. of the cor. of secs. 15, 16, 21 and 22. heretofore described.

Thence I run

N.89°50'W., on a true line bet. secs. 16 and 21.

Over mountainous land; through heavy cedar and pinon pine timber and dense oak, sage and mahogany brush.

Asc.

4.80 Top of spur, 50 ft. above cor., bears NW and SE.

Desc.

9.20 Bottom of swale, 90 ft. below spur, course SE.

Asc.

19.90 Top of ridge, 80 ft. above swale, bears N.35°E. and S.35°W.

Desc.

40.00 Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for $\frac{1}{4}$ sec.cor.. mkd. on brass cap $\frac{1}{4}$ S 16 in N half and S 21 in S half; from which

A pinon pine, 6 ins. dia., bears N.5°E., 133 lks.

dist.. mkd. $\frac{1}{4}$ S 16 B T.

A pinon pine, 7 ins. dia., bears S.60°W., 30 lks.

dist.. mkd. $\frac{1}{4}$ S 21 B T.

46.50 Bottom of canon, 150 ft. below spur, course SW.

Asc.

54.40 Top of ridge, 74 ft. above canon, bears NE and SW.

Desc.

80.00 Intersect temp.cor.

Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground, for cor. of secs. 16, 17, 20, and 21, mkd. on brass cap T 33 S S 17 in NW.

Subdivision of T.33 S., R.7 W.-Continued.

Chains

R 7 W S 16 in NE.

S 21 in SE.; and

S 20 in SW. quadrants; from which

A pinon pine, 6 ins. dia., bears N. 11° E., 6 lks.

dist.. mkd.T 33 S R 7 W S 16 B.T.

A pinon pine, 10 in. dia., bears S. 55° E., 89 lks.

dist.. mkd.T 33 S R 7 W S 21 B.T.

No other trees within limits; raise a mound of stone,

2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.

E. 60.00 chs. high rolling mountainous sloping southwesterly
 Soil, sandy loam about 12 ins. deep, medium texture, on gravelly
 subsoil. Timber, cedar and pinon pine. Undergrowth, oak, sage,
 and mahogany. Good grass. W. 20.00 chs. slopes northwesterly
 sandy clay soil, hard and dry, about 1 ft. deep, subsoil hard
 clay. Timber, cedar and pinon pine. Undergrowth, sage oak, and
 mahogany. No grass.

Mountainous or heavily timbered land, or land covered
 with dense undergrowth, 80.00 chs.

September 17, 1910: At this cor. I set off 2° 24' N., on the
 decl. arc; and at 11 h 55 m a.m., l.m.t., I observe the sun
 on the meridian, the resulting lat. is 37° 56' N., which is
 the proper lat. nearly.

South, on a true line bet. secs. 20 and 21.

Over mountainous land; through heavy cedar and pinon pine
 timber. Asc.

6.00 Spur, 20 ft. above cor., bears E. and W. Desc.

33.00 Bottom of canon, 200 ft. below spur, course S. 85° W. Asc.

34.00 Leave timber, bears E and W.

40.00 Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the
 ground, for $\frac{1}{4}$ sec.cor., mkd.on brass cap $\frac{1}{4}$ S 20 in W half
 and S 21 in E half; dig pits, 18x18x12 ins. N. and S. of post,

Subdivision of T.33 S., R.7 W.-Continued.

Chains	3 ft. dist.; and raise a mound of earth, $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high, W. of cor.
45.00	Top of spur, 150 ft. above hollow, bears N. 75° W. and S. 75° E.
	Desc.
61.50	Enter heavy timber, bears E. and W.
	Leave undergrowth, bears E. and W.
63.00	Bottom of hollow, 100 ft. below spur, course N. 80° W.
	Asc.
70.00	Top of spur, 100 ft. above hollow, bears NW and SE.
	Desc.
80.00	The cor. of secs. 20, 21, 28, and 29.
	Entire mile over rolling high mountains, draining westerly
	Soil, sandy loam from 8 to 16 ins. deep, gravelly subsoil.
	Timber, cedar and pinon pine.
	undergrowth, oak, sage, and mahogany brush.
	Good grass in patches.
	Mountainous or heavily timbered land, or land covered
	with dense undergrowth, 80.00 chs.

September 17, 1910.

John R. Stewart
Instrumentman G.L.O.

September 22, 1910: At 7 h 53 m a.m., l.m.t., I set off $37^{\circ} 56' N.$, on the lat.arc; $0^{\circ} 32' N.$, on the decl.arc; and determine a meridian with the solar, at the cor.of secs. 16, 17, 20, and 21.

Thence I run

N. $0^{\circ} 1' W.$ bet. secs. 16 and 17.

Over mountainous land; through heavy cedar and pinon pine timber and scattering undergrowth.

Desc.

.50 Svale, 10 ft. below cor., course S. 60° W.

Asc.

Subdivision of T.33 S., R.7 W.-Continued.

Chains	
3.30	Top of spur, 40 ft. above hollow, bears N.40°E. and S.40°W. Desc.
8.30	Bottom of hollow, 30 ft. below spur, course SW. Asc. abruptly.
11.70	Top of spur, 50 ft. above hollow, bears NE and SW. Desc.
13.80	Bottom of hollow, 40 ft. below spur, course S.60°W. Asc.
28.40	Top of ridge, 100 ft. above hollow, bears E. and W. Desc.
37.50	Bottom of hollow, 70 ft. below ridge, course W. Asc.
39.40	Top of spur, 40 ft. above hollow, bears E. and W. Desc.
40.00	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor.. mkd. on brass cap $\frac{1}{4}$ S 17 in W half and S 16 in E half; from which A pinon pine, 6 ins. dia., bears S.7°E., 59 lks. dist.. mkd. $\frac{1}{4}$ S 16 B T.
	A pinon pine, 6 ins. dia., bears S.43°W., 42 lks. dist.. mkd. $\frac{1}{4}$ S 17 B T.
43.00	Bottom of swale, 30 ft. below spur, course SW. Asc. abruptly over ledges.
48.30	Top of spur, 75 ft. above swale bears NE and SW. Leave ledges, bears NE and SW. Desc.
61.00	Bottom of swale, 50 ft. below spur, course SW. Asc. abruptly.
67.00	Top of spur, 140 ft. above swale, bears N.35°E. and S.35°W. Desc.
79.40	Bottom of hollow, 30 ft. below spur, course W. Asc.
80.00	Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground, for cor. of secs. 8, 9, 16, and 17, mkd. on brass cap

Subdivision of T.33 S., R.7 W.-Continued.

Chains

T 33 S S 8 in NW.

R 7 W S 9 in NE.

S 16 in SE.; and

S 17 in SW. quadrants; from which

A pinon pine, 10 ins. dia., bears N.42°30'E., 26 lks.

dist..mkd.T 33 S R 7 W S 9 B T.

A pinon pine, 8 ins. dia., bears S.22°30'E., 65 lks.

dist..mkd.T 33 S R 7 W S 16 B T.

No other trees within limits; raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.

S.50.00 chs. high rolling mountains covered with loose volcanic rock. clay soil about 6 ins. deep, hard and dry. subsoil volcanic rock. Timber, cedar and pinon. Undergrowth oak, sage and mahogany. Good grass in patches. N.30.00 chs more broken and steeper slopes southwesterly and drains westerly. Soil white clay about 2 ft. deep and hard, with a gravelly clay subsoil. Heavy cedar and pinon pine timber. Undergrowth, oak and mahogany and sage brush. A very little grass.

Mountainous or heavily timbered land, or land covered with dense undergrowth, 80.00 chs.

September 22, 1910: At this cor. I set off 0°27'N., on the decl. arc; and at 11 h 53 m a.m., l.m.t., I observe the sun on the meridian, the resulting lat. is 37°57'N., which is the proper lat. nearly. September 22, 1910.

September 24, 1910: 7 h 52 m a.m., l.m.t., I set off 37°57'N. on the lat. arc; 0°15'S., on the decl. arc; and determine a meridian with the solar at the cor. of secs. 8, 9, 16; and 17. Thence I run

S.89°50'E., on a random line bet. secs. 9 and 16.

40.00 Set temp. $\frac{1}{4}$ sec.cor.

80.10 Intersect N. and S. line, 21 lks. S. of the cor. of secs. 9, 10, 15, and 16.

Thence I run

N.89°59'W., on a true line bet. secs. 9 and 16.

Over mountainous land; through dense oak, sage and mahogany

Subdivision of T.33 S., R.7. W.-Continued.

Chains	Undergrowth.
	Asc. abruptly.
20.00	Top of steep ascent, bears N. and S. Asc, more gradually.
29.00	Top of knoll, on top of mountain 450 ft. above cor., bears N. and S. Desc.
34.00	Bottom of swale, 50 ft. below knoll. course S. Asc.
37.00	Top of spur, 60 ft. above swale, bears N. and S. Desc. gradually.
37.80	Top of a series of precipitous ledges, bears N. and S. Note: The point for $\frac{1}{4}$ sec.cor. will fall in ledges where cor. cannot be perpetuated; therefore at this point I Set an iron post, 3 ft. long, 1 in. in dia., 20 ins. in the ground, on solid rock, and surrounded by mound of earth and stone, for witness cor. to $\frac{1}{4}$ sec.cor.. mkd. on brass cap W C T 33 S R 7 W S 9 $\frac{1}{2}$ in N half. and S 16 in S half; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, N. of cor.
40.05	Desc. over ledges. Point for $\frac{1}{4}$ sec.cor. falls on ledges, not set.
42.00	Foot of ledges, 160 ft. below top, bears N. and S. Continue descent over steep west slope and volcanic rock slides.
	Enter dense mahogany brush exceeding 10 ft. in height, bears N. and S.
74.00	Leave volcanic rock slides, bears N. and S. Begin more gradual descent, bears N. and S.
80.10	The cor. of secs. 8, 9, 16, and 17. 1300 ft. below top of ridge. E. 37.80 chs. rolling mountainous land; on top of high mountain. Soil, sandy loam, about 2 ft. deep, subsoil beds of lava rock and clay. Undergrowth, oak, mahogany and sage brush. Some scattering cedar and pinon pine timber. light growth of grass. W. 42.30 chs. is on steep west slope of mountain, covered with volcanic rock slides and boulders. Only a

Subdivision of T.33 S., R.7 W.-Continued.

Chains

small amount of soil among the rocks. No timber. Undergrowth, dense growth of mahogany brush. Good grass.

Mountainous land, or land covered with dense undergrowth, 80.10 chs.

September 24, 1910: At the noon hour the sky is overcast and solar observations are impossible.

N.0°1'W., bet. secs. 8 and 9.

Over mountainous land; through scattering cedar and pinon pine timber and dense oak and mahogany brush.

Asc. gradually.

4.00 Begin abrupt ascent, over volcanic rock slides.

22.00 Top of prominent knoll on high ridge, 100 ft. above cor. bears E. and W. Desc. abruptly over rock slides.

39.00 Foot of steep descent, bears SW and S.80°E. 200 ft. below knoll.

40.00 Set an iron post, 3 ft. long .1 in. in dia., 12 ins. in the ground, on bed rock, and surrounded by mound of earth and stone, for $\frac{1}{4}$ sec. cor.. mkd. on brass cap $\frac{1}{4}$ S 8 in W half; and S 9 in E half; and raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$ ft. high, W. of cor.

43.20 Bottom of hollow, 600 ft. below knoll, course W.

Leave boulder slides, bears E. and W.

Asc. abruptly.

60.00 Top of spur, 500 ft. above hollow, bears E. and W.

Desc. gradually.

66.00 Enter heavy cedar and pinon pine timber, bears E. and W. Begin abrupt descent, bears E. and W.

78.00 Bottom of hollow, 400 ft. below spur, course S.75°W.

Asc.

80.00 Set an iron post, 3 ft. long, 2 ins. in dia., 14 ins. in the ground, on solid rock, and surrounded by mound of earth and stone, for cor. of secs. 4, 5, 8, and 9, mkd. on brass cap

Subdivision of T.33 S., R.7 W.-Continued.

Chains

T 33 S S 5 in NW.

R 7 W S 4 in NE.

S 9 in SE.; and

S 8 in SW. quadrants; from which

A pinon pine, 10 ins. dia., bears N.38°E., 50 lks.

dist..mkd.T 33 S R 7 W S 4 B T.

A pinon pine, 8 ins. dia., bears S.58°E., 30 lks.

dist..mkd.T 33 S R 7 W S 9 B T.

A pinon pine, 6 ins. dia., bears N.40°W., 34 lks.

dist..mkd.T 33 S R 7 W S 8 B T.

A pinon pine, 8 ins. dia., bears N.16°W., 32 lks.

dist..mkd.T 33 S R 7 W S 5 B T.

S.43.00 chs. over steep high knoll covered with volcanic rock slides; and through dense oak, mahogany and sage brush. Soil, rich sandy and clay loam in patches between rock slides. Subsoil rock. No timber except a few scattering cedar and pine trees. N.37.00 chs. Over high steep ridges and hollows. Soil clay loam, about 2 ft. deep, subsoil, clay. Timber, cedar and pinon pine. Undergrowth, sage brush. Mountainous or heavily timbered land, or land covered with dense undergrowth, 80.00 chs.

September 24, 1910.

September 29, 1910: At 7 h 51 m a.m., l.m.t., I set off 37°58' N., on the lat.arc; 2°12'S., on the decl.arc; and determine a meridian with the solar, at the cor.of secs.4,5,8, and 9. Thence I run S.89°59'E., on a random line bet.secs.4 and 9.

40.00 Set temp. $\frac{1}{2}$ sec.cor.

80.02 Intersect N. and S.line, 2 lks.S. of the cor.of secs.3,4,9, and 10.

thence I run

Subdivision of T.33 S., R.7 W.-Continued.

Chains	West, on a true line bet. secs. 4 and 9. Over mountainous land; through dense undergrowth. Desc.
1.00	Bottom of hollow, 20 ft. below cor., course NW. Asc.
7.00	Top of spur, 60 ft. above hollow, bears N.30°W. and S.30°E. Desc.
15.50	Bottom of hollow, 110 ft. below ridge, course NW. Asc.
29.00	Top of ridge, 150 ft. above hollow, bears NW and SE. Desc.
40.01	Set an iron post, 3 ft. long, 1 in. in dia., 20 ins. in the ground, on solid rock, and surrounded by mound of stone, for $\frac{1}{2}$ sec. cor.. mkd. on brass cap $\frac{1}{2}$ S. 4 in N half and S 9 in S half; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, N. of cor.
54.00	Enter heavy cedar and pinon pine timber, bears N 60°W. and S.60°E.
77.00	Bottom of hollow, 375 ft. below ridge, course S.65°W. Asc.
80.02	The cor. of secs. 4, 5, 8, and 9. Land, rolling mountains sloping and draining northwesterly. Soil, black loam from 12 to 16 ins. deep, subsoil, clay and gravel. Timber, cedar and pinon pine; undergrowth, oak, sage, and mahogany. Some grass in patches. Mountainous or heavily timbered land, or land covered with dense undergrowth, 80.02 chs. September 29, 1910: At this cor. I set off 2°17'S., on the decl. arc; and at 11 h 51 m a.m., l.m.t., I observe the sun on the meridian, the resulting lat. is 37°58'N., which is the proper lat. nearly. For reasons already explained I run

Subdivision of T.33 S., R.7 W.-Continued.

Chains	N.0°1'W., on a true line bet. secs. 4 and 5. Over mountainous land; through dense undergrowth, and heavy timber. Asc. over volcanic rocks.
2.50	Top of ridge, 50 ft. above cor., bears E. and W. Leave rocks, bears E. and W. Desc.
10.00	Head of hollow, 50 ft. below ridge, course S.70°W. Leave mahogany undergrowth, bears E. and W. Enter dense sage and oak brush, bears E. and W. Asc.
20.00	Top of ridge, 150 ft. above hollow, bears E. and W. Desc.
40.00	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for $\frac{1}{2}$ sec. cor.. mkd. on brass cap $\frac{1}{2}$ S 5 in W. half and S 4 in E half; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.
40.75	Head of hollow, 200 ft. below ridge, course N.70°E. Asc.
51.00	Top of ridge, 70 ft. above hollow, bears NE and SW. Desc.
85.43	Intersect N. bdy. of Tp., 4.73 chs. N.89°58'E., of the cor. of secs. 4, 5, 32, and 33, heretofore described. Set an iron post, 3 ft. long, 2 ins. in dia., 16 ins. in the ground, on solid rock, and surrounded by mound of earth and stone, for closing cor. of secs. 4 and 5, mkd. on brass cap C C T 32 S R 7 W S 32 S 33 in N half. R 7 W S 4 in SE.; and T 33 S S 5 in SW. quadrants; from which A cedar, 10 ins. dia., bears S.64°30'E. 138 lks. dist.. mkd. T 33 S R 7 W S 4 B T. A cedar, 6 ins. dia., bears S.54°30'W., 175 lks. dist.. mkd. T 33 S R 7 W S 5 B T. Note: I destroy all marks on the cor. of secs. 4, 5, 32, and

Subdivision of T.33 S., R.7 W.-Continued.

Chains	33, which pertain to secs. 4 and 5. Land, mountainous. Soil, black loam about 2 ft. deep, subsoil, clay. Timber, cedar and pinon pine. Undergrowth, sage brush, oak brush, and mahogany. Good grass for grazing. Mountainous land, or land covered with dense undergrowth, 85.43 chs.
	September 28, 1910.
	September 16, 1910: At 7 h 55. m a.m., l.m.t., I set off 37°54' N., on the lat.arc; 2°51' N., on the decl.arc; and determine a meridian with the solar at the cor. of secs. 5, 6, 31, and 32, on S.bdy. of Tp., heretofore described. Thence I run N.0°4'W., bet. secs. 31 and 32. Over mountainous land; through heavy cedar and pinon pine and balsam timber, and dense oak and mahogany brush.
	Asc. 3.25 Top of ridge, 60 ft. above cor., bears N.50°E. and S.50°W. Desc.
12.50	Bottom of hollow, 50 ft. below ridge, course N.30°W. Asc.
17.50	Top of spur, 40 ft. above hollow, bears N.80°W. and S.80°E.
27.50	Swale, 50 ft. below spur, course N.80°W. Asc.
32.00	Top of spur, 60 ft. above hollow, bears N.70°E. and S.70°W. Desc.
40.00	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for $\frac{1}{4}$ sec.cor.. mkd. on brass cap $\frac{1}{4}$ S 31 in W half and S 32 in E half; from which A pinon pine, 10 ins. dia., bears N.78°E., 9 lks. dist.. mkd. $\frac{1}{4}$ S 32 B T. A pinon pine, 12 ins. dia., bears N.2°W., 21 lks.

Subdivision of T.33. S., R.7 W.-Continued.

Chains	
	dist..mkd. $\frac{1}{2}$ S 31 B.T.
46.40	Bottom of canon, 100 ft. below ridge, course N.30°E. Asc.gradually.
50.80	Begin more abrupt ascent, bears N.20°E.and S.30°W.
60.00	Top. of spur, 70 ft.above canon, bears N.30°E.and S.30°W. Desc.
70.00	Enter Bottom of Little Canon, bears N.60°W.and S.60°E. Leave timber, bears N.60°W.and S.60°E.
76.50	Little Creek, 3 lks.wide, 3 ins. xx deep, in wash, 10 lks. wide, 10 ft.deep, course N.60°W.
78.50	Road from Parowan to Panguitch bears N.40°W.and S.40°E.
80.00	Set an iron post, 3 ft.long, 2 ins.in dia., 24 ins.in the ground, for cor.of secs.29 30,31, and 32,mkd.on brass cap T 33. S S 30 in NW. R7 W S. 29 in NE. S 32 in SE.;and S 31 in SW.quadrants;from which A cedar, 12 ins.dia., bears N.14°E., 137 lks. dist..mkd.T 33 S R 7 W S 29 B.T.
	No other trees;dig pits, 18x18x12 ins.in each sec.5 $\frac{1}{2}$ ft.dist.;and raise a mound of earth, 4 ft.base, 2 ft.high, W.of cor.
S.46.00	chs.steep mountain ridges and hollows,slope to the north and drains northeast.Soil sandy loam 2 ft.deep, subsoil,clay .Timber,cedar,pinon pine, and balsam.Under- growth,scrub oak and mahogany and sage . N.34.00 chs. low hills and bottom of Little Creek Canon,Soil,rich black loam about 3 ft.deep,subsoil,clay.Timber,cedar and pinon pine.Undergrowth,oak,sage brush and mahogany. Mountainous or heavily timbered land,or land covered with dense undergrowth,80.00 chs.
	September 16,1910:At this cor.I set off 2°47'S.,on the decl.arc;and at 11 h 55 m a.m.,l.m.t.,I observe the sun on the meridian,the resulting lat.is 37°55'N.,which is the proper lat.nearly .

Subdivision of T.35 S., R.7 W.-Continued.

Chains	
	Knowing from retracements made that this line will not close
I	I run East, on a true line bet. secs. 29 and 32.
	Over nearly level land in bottom of Little Creek canon; through heavy oak brush. Asc. gently.
1.00	Leave bottom of canon, bears NW and SE. Asc.
4.00	Leave oak brush, bears NW and SE.
8.50	Top of spur, 80 ft. above canon, bears N.10°W. and S.10°E.
	Desc.
11.00	Bottom of hollow, 40 ft. below spur, course S.
	Asc.
16.80	Top of ridge, 50 ft. above hollow, bears N.15°W. and S.15°E.
	Desc.
22.65	Bottom of hollow, 65 ft. below ridge, course S.
	Asc.
25.00	Top of ridge, 70 ft. above hollow, bears N. and S.
	Desc.
34.00	Bottom of hollow, 80 ft. below ridge, course S.20°E.
	Asc.
40.00	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor.. mkd. on brass cap $\frac{1}{4}$ S 29 in N half and S 32 in S half; from which
	A pinon pine, 7 ins. dial bears N.8°E., 35 lks. dist.. mkd. $\frac{1}{4}$ S 29 B.T.
	A yellow pine, 14 ins. dia., bears S.4°W., 64 lks. dist.. mkd. $\frac{1}{4}$ S 32 B.T.
43.60	Top of spur, 70 ft. above hollow, bears N.10°W. and S.10°E.
	Desc.
46.00	Bottom of hollow, 50 ft. below spur, course S.
	Asc.
50.00	Asc. more abruptly, bears N. and S.
80.57	Intersect N. and S. line, 98 lks. N. of the cor. of secs.

Subdivision of T.33 S., R.7 W.-Continued.

Chains

28, 29, 32, and 33, heretofore described.

Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground, for closing cor. of secs. 29 and 32, mkd. on brass cap

T 33 S R 7 W in N half.

C C S 28 S 33 in E half.

S 32 in SW.; and

S 29 in NW. quadrants; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, N. of cor.

Note: I destroy all marks on the cor. of secs. 28, 29, 32, and 33, which pertain to secs. 29 and 32.

Land, mountainous and broken.

Soil, black loam about 2 ft. deep, subsoil, clay.

Timber, cedar and pinon pine.

Undergrowth, oak, sage brush and buck brush.

Mountainous land, or land covered with dense undergrowth, 80.57 chs.

September 15, 1910.

September 17, 1910: At 7 h 55 m a.m., l.m.t., I set off $37^{\circ} 55' N.$, on the lat. arc; $2^{\circ} 28' W.$, on the decl. arc; and determine a meridian with the solar, at the cor. of secs. 29, 30, 31, and 32.

Thence I run

 $N. 89^{\circ} 57' W.$, on a random line bet. secs. 30 and 31.40.00 Set temp. $\frac{1}{2}$ sec. cor.84.82 Intersect W. bdy. of Tp. 32 lbs. N. of the cor. of secs. 25, 30, 31, and 36, heretofore described.

Thence I run

 $N. 89^{\circ} 54' E.$, on a true line bet. secs. 30 and 31.

Over mountainous land; through heavy cedar and pinon pine timber and scattering oak and mahogany brush.

Asc.

Subdivision of T.33 S., R.7 W.-Continued.

Chains	
1.00	Top of ridge, 20 ft. above cor., bears N. and S.
Desc.	
8.70	Bottom of hollow, 150 ft. below ridge, course N.30°W.
Asc.	
25.00	Top of spur, 150 ft. above hollow, bears N. and S.
Desc.	
39.80	Bottom of hollow, 150 ft. below spur, course N.10°W.
Asc.	
44.82	Set an iron post, 3 ft. long, 1 in. in dia., 18 ins., in the ground, on solid rock, and surrounded by mound of earth and stone, for $\frac{1}{2}$ sec. cor.. mkd. on brass cap $\frac{1}{2}$ S 30 in N half and S 31 in S half.; from which
	A pinon pine, 8 ins. dia., bears N.51°W., 38 lks.
	dist.. mkd. $\frac{1}{2}$ S 30 B T.
	A pinon pine, 8 ins. dia., bears S.83°E., 46 lks.
	dist.. mkd. $\frac{1}{2}$ S 31 B T.
46.00	Top of spur, 100 ft. above hollow, bears N.30°W. and S.30°E.
	Leave timber and enter dense oak sage, and buck brush, bears N.30°W. and S.30°E.
Desc.	
64.80	Bottom of swale, 110 ft. below spur, course N.20°E.
Asc.	
74.80	Top of spur, 40 ft. above hollow, bears N. and S.
Desc.	
81.20	Foot of descent, 50 ft. below spur, bears NW and SE.
	Enter bottom of Little Creek Canon.
82.80	Little Creek, 3 lks. wide, 4 ins. deep, in bottom of wash, 10 lks. wide, 8 ft. deep, course NW.
84.05	Road from Parowan to Pangitch bears N.40°W. and S.40°E.
84.82	The cor. of secs. 29, 30, 31, and 32.
	W.81.20 chs. over broken ridges and hollows draining and sloping northward into Little Creek Canon. Soil black loam mixed with rock, about 18 ins. deep, subsoil, clay.
	Timber, cedar and pinon pine. Undergrowth, oak, sage, and buck

Subdivision of T.33 S., R.7 W.-Continued.

- Chains brush.Good grass for grazing. E.3.60 chs.in bottom of Little Creek Canon,nearly level;Soil,rich black loam free from rocks.about 8 ft.deep,subsoil clay.No timber Undergrowth,oak,sage, and buck brush.Good grass . Mountainous or heavily timbered land,or land covered with dense undergrowth,84.82 chs.
- September 17,1910:At this cor.I set off 2°24'N.,on the decl.arc;and at 11 h 55 m a.m.,l.m.t.,I observe th e sun on the meridian,the resulting lat.is 37°55'N.,which is the proper lat.nearly.
- NO°OL'W.mbet.secs.29 and 30.
- Over mountainous land;through dense undergrowth in bottom of Little Creek Canon.
- Asc.gradually.
- 1.00 Leave canon bottom,bears NW and SE.
Asc.
- 10.00 Enter heavy cedar and pinon pine timber,bears NW and SE.
- 16.40 Foot of perpendicular volcanic ledge,50 ft.high,bears E.and W.
- 25.00 Top of spur,250 ft.above canon,bears N.10°E.and S.10°W.
Desc.
- 38:00 Bottom of swale,40 ft.below spur,course W.
Asc.
- 40.00 Set an iron post,3 ft.long,1 in.in dia.,26 ins.in the ground,for $\frac{1}{2}$ sec.cor..mkd.on brass cap $\frac{1}{4}$ S 30 in W half and S 29 in E half;from which
A pinon pine,6 ins.dia.,bears S.23°E., 38 lks.
dist..mkd. $\frac{1}{4}$ S 29 B T.
A pinon pine,10 ins.dia.,bears S.82°W.,26 lks.
dist..mkd. $\frac{1}{4}$ S 30 B T.
- 67.30 Top of ridge,125 ft.above swale,bears N.80°W.and East.

Subdivision of T.33 S., R.7 W. - Continued.

Chains

Desc.

78.20 Bottom of hollow, 70 ft. below ridge, course NE.

Asc. gradually.

80.00 Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground, for cor. of secs. 19, 20, 29, and 30, mkd. on brass cap

T 33 S S 19 in NW.

R 7 W S 20 in NE.

S 29 in SE.; and

S 30 in SW. quadrants; from which

A cedar, 7 ins. dia., bears N. 61° E., 20 lks.

dist.. mkd. T 33 S R 7 W S 20 B T.

A cedar, 6 ins. dia., bears S. 38° E., 64 lks.

dest., mkd. T 33 S R 7 W S 29 B T.

A pinon pine, 7 ins. dia., bears S. 5° W., 163 lks.

dist.. mkd. T 33 S R 7 W S 30 B T.

A cedar, 10 ins. dia., bears N. 41° W., 149 lks.

dist.. mkd. T 33 S R 7 W S 19 B T.

Land, mountainous and broken.

Soil, clay and sandy loam, about 1 ft. deep. subsoil clay.

Timber, cedar and pinon pine.

Undergrowth, oak, sage, and buck brush.

Good grass for grazing.

Mountainous or heavily timbered land, or land covered with dense undergrowth, 80.00 chs.

September 17, 1910.

September 20, 1910: At 7 h 54m a.m., 1 m.t., I set off 37° 56' N., on the lat. arc; 1° 18' N., on the decl. arc; and determine a meridian with the solar, at the cor. of secs. 19, 20, 29, and 30.

Thence I run

Subdivision of T.33 S., R.7 W.-Continued.

Chains	For reasons already explained.
	East, on a true line bet. secs. 20 and 29.
	Over mountainous land; through scattering cedar and pinon pine timber and dense oak brush and scattering sage and mahogany.
	Desc.
2.00	Bottom of swale, 20 ft. below cor., course NE.
	Asc.
8.70	Top of spur, 75 ft. above swale, bears NE and SW.
	Desc.
16.50	Bottom of hollow, 75 ft. below spur, course N.40°E.
	Asc.
23.00	Top of spur, 100 ft. above hollow, bears N.30°E. and S.30°W.
	Desc.
26.00	Leave timber, bears NE and SW.
	Leave dense oak and enter dense sage brush, bears NE and SW.
29.50	Bottom of hollow, 50 ft. below spur, course N.15°E.
	Leave sage brush and enter dense oak brush, bears N. and S.
	Asc.
38.00	Top of spur, 50 ft. above hollow, bears N. and S.
	Desc.
39.85	Bottom of hollow, 40 ft. below spur, course N.35°W.
40.00	Set an iron post, 3 ft. long, 1 in. in dia., 20 ins. in the ground, on solid rock, and surrounded by mound of earth and stone, for $\frac{1}{4}$ sec. cor. mkd. on brass cap $\frac{1}{4}$ S 20 in N half and S 20 in S half; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, N. of cor. ✓
42.00	Enter burnt timber, bears N. and S.
45.00	Leave burnt timber, bears N. and S.
49.00	Enter sage brush, bears N. and S.
53.00	Top of spur, 100 ft. above hollow, bears N. and S.
	Leave sage brush and enter dense sage and buck brush.
	bears N. and S.
	Desc.
64.00	Bottom of hollow, 200 ft. below spur, course N.30°W.

Subdivision of T.33 S., R.7 W.-Continued.

Chains	
	Asc.
74.00	Top of spur, 75 ft. above hollow, bears N. and S.
	Desc.
77.00	Bottom of canon, 75 ft. below spur, course N.30°W. Leave dense and enter scattering undergrowth, bears N.30°W and S.30°E. Enter heavy cedar and pinon pine timber, bears N.30°W. and S.30°E.
	Asc.
80.60	Intersect N. and S. line, 100 lks. N. of the cor. of secs. 20, 21, 28, and 29. Set an iron post, 3 ft. long, 2 ins. in dia., 16 ins. in the ground, on solid rock, and surrounded by mound of stone, cor closing cor. of secs. 20 and 29, mkd. on brass cap T 33 S R 7 W in N half. C C S 21 S 28 in E half. S 29 in SW.; and . S 20 in NW. quadrants; from which A cedar, 8 ins. dia., bears S.42°W., 57 lks. dist..mkd.T 33 S R 7 W S 29 B T. A cedar, 12 ins. dia., bears N.78°W., 65 lks. dist..mkd.T 33 S R 7 W S 20 B T.
	Note: I destroy all marks on the cor. of secs. 20, 21, 28, and 29 which pertain to secs. 20 and 29. Land, mountainous, sloping and draining northward. Soil, sandy loam; 2ft deep, clay subsoil; Timber, cedar and pinon pine. Undergrowth, oak, sage, mahogany, and buck brush. Good grass . Mountainous or heavily timbered land, or land covered with dense undergrowth, 80.60 chs. September 20, 1910 At this cor. I set off 1°14'N., on the decl. arc; and at 11 h 54 m a.m., l.m.t., I observe the sun on the meridian, the resulting lat. is 37°56'N., which is the proper lat. nearly.

Subdivision of T.53 S., R.7 W.-Continued.

Chains

S.89°54'W., on a random line bet.secs.19 and 30.

40.00 Set temp. $\frac{1}{2}$ sec.cor.

84.60 Intersect W.bdy.of Tp., 21 lks.N.of the cor.of secs.19 and 30, heretofore described.

Thence I run

N.89°45'E., on a true line bet.secs.19 and 30.

Over mountainous land; through heavy cedar and pinon pine timber.

Asc.

5.00 Top of ridge, 30 ft.above cor., bears N.and S.

Desc.

14.00 Bottom of hollow, 300 ft.below ridge, course S.

Leave timber and enter dense sage brush, bears N.and S.

Asc.

26.00 Leave sage brush and enter scattering oak and buck brush bears N.and S.

Begin more abrupt ascent over volcanic boulders.

44.60 Set an iron post, 3 ft.long, 1 in.in dia., 12 ins.in the ground, on solid rock, and surrounded by mound of earth, and stone, for $\frac{1}{2}$ sec.cor.. mkd.on brass cap $\frac{1}{2}$ S 19 in N half and S 30 in S half; from which

A cedar, 5 ins.dia., bears N.33 lks.dist.

mkd. $\frac{1}{2}$ S 19 B T.

A pinon pine, 5 ins.dia., bears S.12°E., 53 lks.

dist.. mkd. $\frac{1}{2}$ S 30 B T..

Enter scattering cedar and pinon pine timber, bears N.and S.

47.90 Top of ridge, 500 ft.above hollow, bears N.and S.

Iron Peak bears N.about 2.00 chs.dist.This is one of the most prominent peaks in the township.

Desc.

71.00 Bottom of hollow, 400 ft.below ridge, course N.

Subdivision of T.33 S., R.7 W.-Continued.

Chains	
	Asc. gradually.
75.00	Top of ridge, 25 ft. above hollow, bears N. and S.
	Desc.
84.60	The cor. of secs. 19, 20, 29, and 30. W. 47.90 chs. on high mountains, steep slopes: draining southward into Little Creek Canon; Soil black loam mixed and covered with volcanic rocks, highly impregnated with iron ore, hematite, and specularite. Timber, cedar and pinon pine. Undergrowth, oak, sage, mahogany, and buck brush. Good grass in patches. E. 36.10 chs. on northeast slope of high ridge covered with volcanic rocks containing iron ore. Soil clay loam about 1 ft. deep, subsoil, rock. Timber cedar and pinon pine. Good grass.
	Mountainous or heavily timbered land, or land covered with dense undergrowth, 84.60 chs.

September 20, 1910.

September 21, 1910: At 7 h 53 m a.m., l.m.t., I set off $37^{\circ}56'N.$, on the lat. arc; $0^{\circ}55'W.$, on the decl. arc; and determine a meridian with the solar, at the cor. of secs. 19, 20, 29, and 30.

Thence I run

 $N.0^{\circ}1'W.$, bet. secs. 19 and 20.

Over mountainous land; through scattering cedar and pinon pine timber and dense sage, mahogany and oak brush.

Asc.

7.00 Top of ridge, 20 ft. above cor., bears NE and SW.

Desc.

24.00 Bottom of swale, 60 ft. below ridge, course NE.

Asc.

27.70 Top of ridge, 40 ft. above swale, bears NE and SW.

Desc.

35.00 Begin abrupt descent, bears NE and SW.

39.80 Bottom of hollow, 200 ft. below ridge, course NE.

Subdivision of T.33.S., R.7.W.-Continued.

Chains	
	Asc.
40.00	Set an iron post, 3 ft. long, 1 in. in dia., 20 ins. in the ground, on solid rock, surrounded by mound of stone, for $\frac{1}{4}$ sec.cor..mkd.on brass cap $\frac{1}{4}$ S 19 in W half and S 20 in E half; from which A mahogany, 5 ins.dia., bears N.42°E., 32 lks. dist..mkd. $\frac{1}{4}$ S 20 B.T. A pinon pine, 8 ins.dia., bears S.18°W., 98 lks. dist..mkd. $\frac{1}{4}$ S 19 B.T.
48.15	Top of spur, 200 ft. above hollow, bears E. and W. Desc.
80.00	Point 200 ft. below spur, Set an iron post, 3 ft. long, 2 ins.in dia., 24 ins.in the ground, for cor.of secs.17,18,19, and 20,mkd.on brass cap T 33 S S 18 in NW. R 7 W S 17 in NE. S 20 in SE.; and S 19 in SW.quadrants; from which A cedar, 8 ins.dia., bears N.13°E., 100 lks. dist..mkd.T 33 S R 7 W S 17 B.T. A cedar, 6 ins.dia., bears S.63°E.27 lks. dist..mkd.T 33 S R 7 W S 20 B.T. A pinon pine, 7 ins.dia., bears S.75°W., 152 lks. dist..mkd.T 33 S R 7 W S 19 B.T. A cedar, 7 ins.dia., bears N.3°W., 80 lks. dist.mkd.T 33 S R 7 W S 18 B.T. S.35.00 chs.rolling mountain ridge, covered with cedar and pinon pine timber and dense sage,oak and mahogany brush draining northeasterly.Soil,sandyloam,6 ins.deep,medium texture.subsoil,rocky shale.Some good grass .N.45.00 chs. steep mountainous land,covered with cedar and pinon pine timber and sage oak and mahogany brush.Soil,clay about 6 ins.deep,hard and dry,limestone and shale subsoil.slopes east and drains northerly.Some good grass.

Subdivision of T.33 S., R.7 W.-Continued.

Chains	<p>Mountainous or heavily timbered land, or land covered with dense undergrowth, 80.00 chs.</p> <p>September 21, 1910: At this cor. I set off $0^{\circ}50'N.$, on the decl. arc; and at 11 h 53m a.m., l.m.t., I observe the sun on the meridian, the resulting lat. is $37^{\circ}56'N.$, which is the proper lat. nearly.</p> <p>For reasons already explained I run East, on a true line bet. secs. 17 and 20. Over mountainous land; through heavy cedar and pinon pine timber, and dense sage, oak and mahogany brush. Desc. 16.00 Leave undergrowth, bears N. and S. 17.00 Creek, 3 lks. wide, 2 ins. deep, in wash, 20 lks. wide, 6 ft. deep, in bottom of canon, 80 ft. below cor., course N. $20^{\circ}W.$. Asc. abruptly. 34.00 Top of spur, 400 ft. above canon, bears NE and SW. Desc. abruptly over ledges. 34.80 Leave ledges, bears NE and SW., 60 ft. below top. 40.00 Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor.. mkd. on brass cap $\frac{1}{4}$ S 17 in N half and S 20 in S half; from which A pinon pine, 10 ins. dia., bears N. $8^{\circ}E.$, 36 lks. dist.: mkd. $\frac{1}{4}$ S 17 B T. A pinon pine, 8 ins. dia., bears S. $20^{\circ}W.$, 35 lks. dist.: mkd. $\frac{1}{4}$ S 20 B T. 63.00 Bottom of swale, 150 ft. below spur, course S. $30^{\circ}W.$. Asc. 66.00 Top of spur, 75 ft. above swale, bears NE and SW. Desc. 74.00 Bottom of swale, 50 ft. below spur, course S. $70^{\circ}W.$. Asc. gradually.</p>
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Subdivision of T.33 S., R.7 W.-Continued.

Chains

80.70

Intersect N. and S. line, 118 lks. North of the cor. of secs. 16, 17, 20, and 21, heretofore described.
 Set an iron post, 3 ft. long, 2 ins. dia., 24 ins. in the ground, for closing cor. of secs. 17 and 20, mkd. on brass cap T 33 S R 7 W in N half.
 C C S 16 S 21 in E half;
 S 20 in SW.; and
 S 17 in NW. quadrants; from which A pinon pine, 6 ins. dia., bears S. 32° W., 226 lks. dist.. mkd. T 33 S R 7 W S 20 B T.
 A pedar, 18 ins. dia., bears N. 26° W., 61 lks. dist.. mkd. T 33 S R 7 W S 17 B T.
 Note: I destroy all marks on the cor. of secs. 17, 16, 20, and 21, which pertain to secs. 17 and 20. ✓
 Land, mountainous, broken and steep slopes.
 Soil, clay loam, mixed with rock. subsoil, clay and shale.
 Timber, cedar and pinon pine.
 Undergrowth, oak, sage, and mahogany.
 Good grass for grazing.
 Mountainous or heavily timbered land, 80.70 chs.

September 21, 1910.

September 22, 1910: At 3 h 53 m p.m., l.m.t., I set off $37^{\circ} 56'$ N., on the lat. arc; $0^{\circ} 25'$ N., on the decl. arc; and determine a meridian with the solar, at the cor. of secs. 17, 18, 19, and 20.

Thence I run

S. $89^{\circ} 45'$ W., on a random line bet. secs. 18 and 19.

40.00

Set temp. $\frac{1}{2}$ sec. cor.

84.49

Intersect W. bdy. of Tp., 10 lks. N. of the cor. of secs. 18 and 19, heretofore described. ✓

Thence I run

Subdivision of T.33 S., R.7 W.-Continued.

Chains	N.89°49'E., on a true line bet. secs. 18 and 19.
	Over mountainous land; through heavy cedar and pinon pine timber.
	Desc.
.80	Bottom of swale, 20 ft. below cor., course N.
	Asc.
1.60	Top of spur, 30 ft. above swale, bears N. and S.
	Desc.
19.40	Bottom of hollow, 150 ft. below spur, course N.10°E.
	Leave timber, bears N.10°E. and S.10°W.
	Asc.
21.90	Top of spur, 60 ft. above hollow, bears N. and S.
	Desc.
27.50	Bottom of swale, 70 ft. below spur, course N.
	Asc.
32.22	Top of spur, 50 ft. above swale, bears N. and S.
	Desc.
32.25	Leave dense and scattering undergrowth, bears N. and S.
	Enter heavy timber, bears N. and S.
39.90	Swale, 50 ft. below spur, course N.10°E.
	Asc.
44.00	Top of ridge, 50 ft. above swale, bears N.10°W. and S.10°E.
	Desc.
44.49	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor.. mkd. on brass cap $\frac{1}{4}$ S 18 in N half and S 19 in S half; from which
	A pin n pine, 6 ins. dia., bears N.47°W., 22 lks. dist.. mkd. $\frac{1}{4}$ S 18 B.T. ✓
	A pinon pine, 8 ins. dia., bears S.37°E., 4 lks. dist.. mkd. $\frac{1}{4}$ S 19 B.T. ✓
70.00	Bottom of hollow, 100 ft. below spur, course N.
	Asc. abruptly.
79.20	Top of ridge, 75 ft. above hollow, bears N.10°W. and S.10°E.
	Desc.
84.49	The cor. of secs. 17, 18, 19, and 20.

Subdivision of T.33 S., R.7 W.-Continued.

Chains	Land mountainous, on north slopes of high ridge, sloping and draining northward.
	Soil, black sandy loam from 8 to 14 ins. deep, clay subsoil. land covered with volcanic rock containing some iron ore.
	Timber, cedar and pinon pine.
	Undergrowth, oak, sage, and mahogany.
	A very little grass.
	Mountainous or heavily timbered land, or land covered with dense undergrowth, 84.49 chs.

September 22, 1910.

September 25, 1910: At 7 h 53 m a.m., l.m.t., I set off 37°56' N., on the lat.arc; 0°08'N., on the decl.arc; and determine a meridian with the solar, at the cor.of secs. 17, 18, 19, and 20.

Thence I run

N.0°1'W., betsecs. 18 and 17.

Over mountainous land; through heavy timber and dense undergrowth.

Desc.

14.50 Bottom of hollow, 100 ft. below cor., course N.60°E..

Asc.

20.00 Top of spur, 50 ft. above hollow, bears N.60°E. and S.60°W.

Desc.

29.00 Creek, 3 lks.wide, 2 ins.deep, in bottom of canon, 80 ft. below spur, course NW.

Asc.

40.00 Set an iron post, 3 ft.long, 1 in.in dia., 26 ins.in the ground, for $\frac{1}{4}$ sec.cor...mkd.on brass cap $\frac{1}{4}$ S 18 in W half and S 17 in E half;from which

: A cedar, 8 ins.dia., bears N.52°E., 88 lks.

dist..mkd. $\frac{1}{4}$ S 17 B.T..

A pinon pine, 10 ins.dia., bears S.65°W., 33 lks.

Subdivision of T.33 S., R.7 W.-Continued.

Chains	
	dist..mkd. $\frac{1}{4}$ S 18 B T.✓
45.00	Top of ridge, 150 ft. above canon, bears E. and W. Desc.
54.40	Bottom of hollow, 90 ft. below ridge, course N.80°W. Asc.
59.80	Top of ridge, 70 ft. above hollow, bears E. and W. Desc.
61.70	Bottom of swale, 50 ft. below ridge, course N.80°W. Asc.
80.00	Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground, for cor. of secs. 7, 8, 17, and 18, mkd. on brass cap T 33 S S 7 in NW. R 7 W S 8 in NE. S. 17 in SE.; and S 18 in SW. quadrants; from which A cedar, 18 ins. dia., bears N.54°E., 45 lks. dist..mkd. T 33 S R 7 W S 8 B T.✓ A cedar, 6 ins. dia., bears S.64°E., 74 lks. dist..mkd. T 33 S R 7 W S 17 B T.✓ A cedar, 16 ins. dia., bears S.64°W., 62 lks. dist..mkd. T 33 S R 7 W S 18 B T.✓ A cedar, 8 ins. dia., bears N.14°W., 29 lks. dist..mkd. T 33 S R 7 W S 7 B T.✓ S.29.00 chs. on rolling ridges and hollows, slopes and drains northerly. Soil, black sandy loam about 1 ft. deep, subsoil, clay. Timber, cedar and pinon pine. Undergrowth, oak sage and mahogany. No grass. N.51.00 chs. high and rough slopes north and south from ridges running east and west. Soil, white sand mixed with gravel and covered with loose sandstone, subsoil sandstone. Timber, cedar and pinon pine. Undergrowth, sage and oak brush. A very little grass. Mountainous or heavily timbered land, or land covered with dense undergrowth, 80.00 chs. September 23, 1910: At this cor. I set off 0°04'N., on the

Subdivision of T.33 S., R.7 T.-Continued.

Chains

decl.arc; and at 11 h 53 m a.m., l.m.t., I observe the sun on the meridian, the resulting lat. is $37^{\circ}57'N.$, which is the proper lat. nearly.

For reasons already explained I run

East, on a true line bet. secs. 8 and 17.

Over mountainous land; through heavy cedar and pinon pine timber and scattering undergrowth.

Asc. gradually.

40.00 Set an iron post, 3 ft. long, 1 in. in dia., 26. ins. in the ground, for $\frac{1}{2}$ sec.cor.. mkd.on brass cap $\frac{1}{4}$ S 8 in N half; and S 17 in S half; from which

A cedar, 5 ins. dia., bears $N.75^{\circ}W.$, 57 lks.
dist.. mkd. $\frac{1}{4}$ S 8 B T.

A pinon pine, 6 ins. dia., bears $S.77^{\circ}E.$, 8 lks.
dist.. mkd. $\frac{1}{4}$ S 17 B T.

55.00 Leave heavy and enter scattering timber, bears N. and S.
Enter dense sage brush, bears N. and S.

76.20 Top of ridge, 100 ft. above $\frac{1}{2}$ sec.cor., bears NE and SW.
Enter heavy timber, bears NE and SW.
Desc. over volcanic boulders.

80.80 Intersect N. and S. line, 130 lks. N. of the cor. of secs.

8, 9, 16, and 17, heretofore described.

Set an iron post, 3 ft. long, 2 ins. in dia., 16 ins. in the ground, on solid rock, and surrounded by mound of earth and stone, for closing cor. of secs. 8 and 17, mkd.on brass cap

T 33 S R 7 W in N half.

C C S 9 S 16 in E half.

S 17 in SW.; and

S 8 in NW. quadrants; from which

A pinon pine, 6 ins. dia., bears $N.22^{\circ}W.$, 15 lks.
dist.. mkd. T 33 S R 7 S 17 S T.

Subdivision of T.33 S., R.7 W.-Continued.

Chains	An oak, 5 ins. dia., bears N.4°W., 48 lks. dist..mkd.T 33 S R 7 W S 8 B T. Note:I destroy all marks on the cor.of secs.8,9,16, and 17 which pertain to secs.8 and 17. Land, rolling mountain side sloping southwest and covered with volcanic boulders. Soil, sandy and clay loam; about 2 ft. deep, dry and poor, subsoil, gravelly. Timber, cedar and pinon pine. Undergrowth, oak, sage, and mahogany. A very little grass. Mountainous or heavily timbered land, or land covered with dense undergrowth, 80.80 chs.
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September 23, 1910.

September 30, 1910: At 7 h 50 m a.m., l.m.t., I set off 37° 57'N., on the lat.arc; 2°35'S., on the decl.arc; and determine a meridian with the solar, at the cor.of secs.7,8,17, and 18.

Thence I run

S.89°49'W., on a random line bet.secs.7 and 18.

40.00 Set temp. & sec.cor.

84.31 Intersect W.bdy.of Tp., 3 lks.S.of the cor.of secs.7 and 18., heretofore described.

Thence I run

N.89°50'E., on a true line bet.secs.7 and 18.

Over mountainous land; through scattering timber and scattering undergrowth.

Asc.

1.00 Top of spur, 25 ft.above cor., bears N. and S.

Desc.

15.00 Bottom of hollow, 200 ft.below spur, course S.20°W.

Subdivision of T.33 S., R.7 W.-Continued.

Chains

Asc.

35.50 Top of spur, 300 ft. above hollow, bears N. and S.

Desc.

44.31 Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for $\frac{1}{4}$ sec.cor.. mkd. on brass cap $\frac{1}{4}$ S 7 in N half and S 18 in S half; from whichA cedar, 8 ins. dia., bears N. $20^{\circ}30'W.$, 7 lks.dist.. mkd. $\frac{1}{4}$ S 7 B T.A pinon pine, 12 ins. dia., bears S. $20^{\circ}W.$, 65 lks.Dist.. mkd. $\frac{1}{4}$ S 18 B T.

45.30 Bottom of hollow, 200 ft. below ridge, course S.

Asc.

56.30 Top of spur, 50 ft. above hollow, bears NW and SE.

Desc.

64.30 Bottom of hollow, 50 ft. below spur, course S.

Asc.

73.30 Top of spur, 50 ft. above hollow, bears NE and SW.

Desc.

79.30 Bottom of hollow, 50 ft. below spur, course S.

Asc.

84.31 The cor. of secs. 7, 8, 17, and 18.

Land, mountainous and broken, slopes and drains northwesterly.

Soil, rich sandy loam about 12 ins. deep, subsoil sandstone.

Timber, cedar and pinon pine.

Undergrowth, oak and sage brush.

A very little grass.

Mountainous or heavily timbered land, 84.31 chs.

September 30, 1910: At this cor. I set off $2^{\circ}40'S.$, on the decl.arc; and at 11 h 50 m a.m., l.m.t., I observe the sun on the meridian, the resulting lat. is $37^{\circ}57'N.$, which is the proper lat. nearly.

N. $0^{\circ}2'W.$, bet. secs. 7 and 8.

Subdivision of T.33 S., R.7 W.-Continued.

Chains	Over mountainous land; through heavy timber and dense undergrowth.
	Asc.
2.00	Top of ridge, 40 ft. above cor., bears N.30°E. and S.30°W.
	Desc.
14.00	Bottom of swale, 100 ft. below ridge, course N.65°W.
	Asc.
15.00	Top of spur, 20 ft. above swale, bears E. and W.
	Desc.
18.00	Bottom of swale, 20 ft. below spur, course W.
	Asc.
20.50	Top of spur, 20 ft. above swale, bears NE and SW.
	Desc.
25.00	Bottom of swale, 30 ft. below spur, course W.
	Asc. gradually.
40.00	Top of ridge, 50 ft. above swale, bears E. and W. Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor.. mkd. on brass cap $\frac{1}{4}$ S 7 in W half and S 8 in E half; from which A cedar, 7 ins. dia., bears N.45°E., 27 lks. dist.. mkd. $\frac{1}{4}$ S 8 B.T. A cedar, 7 ins. dia., bears S.89°W., 51 lks. dist.. mkd. $\frac{1}{4}$ S 7 B.T.
45.10	Bottom of swale, 20 ft. below ridge, course S.80°W.
	Asc.
46.50	Top of spur, 30 ft. above swale, bears N.80°E. and S.80°W.
	Desc.
48.60	Bottom of swale, 20 ft. below spur, course S.80°W.
	Asc. abruptly.
59.00	Top of ridge, 80 ft. above swale, bears N.50°E. and S.50°W.
	Desc.
61.00	Bottom of hollow, 20 ft. below ridge, course W.
	Asc.
80.00	Set an iron post, 3 ft. long, 2 ins. dia., 24 ins. in the

Subdivision of T.33 S., R.7 W.-Continued.

	Chains	ground, for cor. of secs. 5, 6, 7, and 8, mkd. on brass cap T 33 S S 6 in NW. R 7 W S 5 in NE. S 8 in SE.; and S 7 in SW. quadrants; from which A pinon pine, 12 ins. dia., bears N.75°E., 37 lks. dist..mkd.T 33 S R 7 W S 5 B T. A pinon pine, 12 ins. dia., bears S.25°E., 104 lks. dist..mkd.T 33 S R 7 W S 8 B T. A cedar, 10 ins. dia., bears S.21°W., 6 4 lks. dist..mkd.T 33 S R 7 W S 7 B T. A pinon pine, 7 ins. dia., bears N.77°W., 44 lks. dist..mkd.T 33 S R 7 W S 6 B T. S.40 .00 chs. rolling mountain ridges and hollows. Soil clay mixed with coarse gravel 12 ins. deep, subsoil, beds of loose and cemented conglomerate rocks. drains west. Timber, cedar and pinon pine. Undergrowth, sage oak and mahogany. No grass. N.40.00 chs. over more rolling land. slopes and drains west. Soil, clay loam, dry and hard about 14 ins. deep, subsoil gravel. Timber, cedar and pinon pine. Undergrowth, mostly sage brush some oak and mahogany. No grass. Mountainous or heavily timbered land, or land covered with dense undergrowth, 80.00 chs.
		For reasons already explained I run East, on a true line bet. secs. 5 and 8. Over mountainous land; through cedar and pinon pine timber Asc.
7.00		Top of spur, 80 ft. above cor., bears N.15°E. and S.15°W. Desc. gradually.
20.00		Enter dense sage brush, bears N. and S.

Subdivision of T.33 S., R.7 W.--Continued.

Chains	
51.00	Leave heavy timber and enter scattering timber, bears N. and S.
34.50	Bottom of hollow, 100 ft. below ridge, course S.30°W. Asc.
40.00	Set an iron post, 3 ft. long, 1 in. in dia., 18 ins. in the ground, fix on solid rock, and surrounded by mound of earth, and stone, for $\frac{1}{4}$ sec. cor.. mkd. on brass cap $\frac{1}{4}$ S 5 in N. half and S 8 in S half; and raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$ ft. high, N. of cor.
49.00	Top of spur, 140 ft. above hollow, bears N.10°E. and S.10°W. Leave sage brush and enter heavy timber, bears N. and S. Desc.
58.50	Bottom of hollow, 100 ft. below ridge, course SW. Asc. Leave heavy timber and enter dense oak and mahogany brush exceeding 10 ft. in height, bears NE and SW.
76.70	Top of knoll, 150 ft. high, Desc.
80.65	Intersect N. and S. line, 127 lks. N. of the cor. of secs. 4, 5, 8, and 9, heretofore described. Set an iron post, 3 ft. long, 2 ins. in dia., 14 ins. in the ground, on solid rock, and surrounded by mound of earth and stone, for closing cor. of secs. 5 and 8, mkd. on brass cap T 33 S R 7 W in N half. C C S 4 S 9 in E half. S 8 in SW.; and S 5 in NW. quadrants; from which A cedar, 10 ins. dia., bears S89°W., 130 lks. dist.. mkd. T 33 S R 7 W S 8 B T. A pinon pine, 7 ins. dia., bears N.89°30'W., 123 lks. dist.. mkd. T 33 S R 7 W S 5 B T. Note : I destroy all marks on the cor. of secs. 4, 5, 8, and 9, which pertain to secs. 5 and 8. ✓

Subdivision of T.33 S., R.7 W.-Continued.

Chains
 Land, mountainous, broken and draining southward.
 Soil, clay and sandy loam about $1\frac{1}{2}$ ft. deep, and covered and mixed well with rock. Subsoil clay and gravel.
 Timber, cedar and pinon pine.
 Undergrowth, sage, oak, buck, and mahogany.
 Good grass in patches.
 Mountainous or heavily timbered land, or land covered with dense undergrowth, 80.65 chs.

September 30, 1910.

October 1, 1910: At 7 h 50 m a.m., l.m.t., I set off $37^{\circ}58'N.$, on the lat.arc; $2^{\circ}59'S.$, on the decl.arc; and determine a meridian, with the solar, at the cor.of secs.5, 6, 7, and 8. thence I run

$S.89^{\circ}50'W.$, on a random line betsecs.6 and 7.

40.00 Set temp. $\frac{1}{2}$ sec.cor.

84.00 Intersect W.bdy.of Tp.5.80 chs. South of the cor.of secs. 1, 6, 7, and 12, heretofore described. ✓

Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground, for closing cor.of secs.6 and 7, mkd.on brass cap

T 33 S in N half.

C C R 8 W S 1 S 12 in W half.

R 7 W S 6 in NE.

S 7 in SE.quadrants; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, E.of cor..

Note: I destroy all marks on the cor.of secs.6 and 7, which pertain to secs.6 and 7.

Thence I run

$N.89^{\circ}50'E.$, on a true line betsecs.6 and 7.

Over mountainous land; through heavy timber and dense undergrowth.

Asc.

22.30 Top of spur, 80 ft. above cor., bears $N.10^{\circ}E.$ and $S.10^{\circ}W.$

Subdivision of T.33 S., R.7 W.-Continued.

Chains

Desc.

31.30 Bottom of hollow, 90 ft. below spur, course SW.

Asc.

36.30 Top of steep ascent, 100 ft. above hollow, bears N. and S.
Thence over flat top ridge.44.00 Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the
ground, for $\frac{1}{4}$ sec. cor. mkd. on brass cap $\frac{1}{4}$ S 6 in N half
and S 7 in S half; from which

A pinon pine, 8 ins. dia., bears N.10°E., 6 lks.

dist..mkd. $\frac{1}{4}$ S 6 B T.

A pinon pine, 7 ins. dia., bears S.65°E., 68 lks.

dist..mkd. $\frac{1}{4}$ S 78 B T.

49.80 Leave ridge top, bears N. and S.

Desc.

67.00 Bottom of swale, 50 ft. below ridge, course SW.

Asc.

75.10 Top of spur, 50 ft. above swale, bears N.10°E. and S.10°W.

Desc.

80.30 Bottom of swale, 60 ft. below ridge, course SW.

Asc.

84.00 The cor. of secs. 5, 6, 7, and 8.

Land, broken, high ridges and steep slopes.

Soil, clay loam, 2 ft. deep, dry and hard, clay subsoil covered
and mixed with rock.

Timber, cedar and pinon pine.

Undergrowth, oak and sage brush.

No grass.

Mountainous or heavily timbered land, or land covered with
dense undergrowth, 84.00 chs.October 1, 1910 At this cor. I set off 3°03'S., on the decl.
arc; and at 11 h 50 m a.m., l.m.t., I observe the sun on the
meridian the resulting lat. is 37°58'N., which is the
proper lat. nearly.

Subdivision of T.33 S., R.7 W.-Continued.

Chains	For reasons already explained, I run N.0°2'W., on a true line bet. secs. 5 and 6. Over mountainous land; through heavy cedar and pinon pine timber. Asc. over lava boulders and low ledges.
1.00	Top of spur, 20 ft. above cor., bears N.40°E. and S.40°W. Desc.
10.00	Swale, 60 ft. below spur, course S.40°W. Asc.
30.50	Top of ridge, 40 ft. above swale, bears E. and W. Desc.
30.75	Leave timber, bears E. and W. Enter dense sage and oak brush, bears E. and W.
40.00	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor.. mkd. on brass cap $\frac{1}{4}$ S 6 in. W half and S 5 in. E half.; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.
43.00	Head of hollow, 150 ft. below ridge, course N.30°E. Asc. gradually.
45.00	Enter cedar and pinon pine timber, bears NE and SW. Leave undergrowth, bears NE and SW.
62.00	Top of spur, 30 ft. above swale, bears N.10°E. and S.10°W. Desc.
74.00	Bottom of hollow, 175 ft. below spur, course N.64°W. Asc.
84.00	Ridge, 75 ft. above hollow, bears N.60°W. and S.60°E. Desc.
85.00	Intersect N. bdy. of Tp., 362 lks. S.88°58'E., of the cor. of secs. 5, 6, 31, and 32, heretofore described. Set an iron post, 3 ft. long, 3 ins. dia., 24 ins. in the ground, for closing cor. of secs. 5 and 6, mkd. on brass cap C C T 32 S R 7 W S 31 S 32 in N half. R 7 W S 5 in SE.; and T 33 S S 6 in SW. quadrants; from which A pinon pine, 5 ins. dia., bears S.11°E., 37 lks. dist.. mkd. T 33 S R 7 W S 5 B T.

Subdivision of T.33 S., R.7 W.-Continued.

Chains.

A cedar, 9 ins. dia., bears S. 51° W., 118 lks.

dist.. m.kd.T 33 S R 7 W S 6 B T.

Note; I destroy all marks on the cor. of secs. 5, 6, 31, and 32 which pertain to secs. 5 and 6.

S.30 chs.steep mountainous land,slopes south and drains southwest.Soil sandy clay;about 18 ins.deep,clay subsoil numerous beds of lava rock.Timber,heavy cedar and pinon pine.Undergrowth,sage.Light growth of grass.

N.55.00 chs.over rolling ridges and hollows,sloping northward and draining northwesterly.Soil,clay 10 ins.deep clay subsoil.Scattering cedar and pinon pine timber.

Undergrowth,dense oak and sage brush.Some grass .

Mountainous or heavily timbered land,or land covered with dense undergrowth,85.00 chs.

October 1, 1910.

Grimby Stewart

Instrumentman G.L.O.

General Description.

This township lies on the west slope of a range of mountains running northeasterly and southwesterly;while the ridges and hollows from the main range run westerly into Parowan valley.The entire township is in the high part of the mountains and is steep and rugged . The slopes in places are almost denuded of soil on account of being so steep that the rains have washed the soil into the canons and the canons and hollows are so steep that whatever soil is washed into them is carried on down to the valley;by the frequent floods.The hollows and canons are usually narrow and are cut down to bedrock and kept washed pretty clean from soil as noted above.The formation

Subdivision of T. 33 S., R. 7 W.-Continued.

in general is sedimentary, and composed mostly of red sandstone, which is generally horizontal but has been disturbed by volcanic action, especially overflows as volcanic rock covers a good portion of the township, the seat of the volcanic disturbance appears to have been at Iron Peak in sec. 19.

The township is well watered for grazing purposes, by Little Creek in the southern part, Cottonwood Creek in the northern part and a number of small springs and streams in different parts of the township. But there is practically no land in the township suitable for agricultural purposes other than grazing; and it is grazed principally by sheep.

There are no settlers in the township except those on the portion of the township surveyed previously.

There is a splendid showing of iron ore in sections 19, 20, 29, and 30. Considerable prospecting has already been done. The ore is of an exceptionally high grade but has not as yet been found in large quantities.

In the western part of the township cedar and pinon pine timber is heavy but in the eastern part mahogany under-growth is very dense and the timber is scattering except in places. Oak, sage, buck and choke cherry brush is found more or less throughout the township.

I would suggest that secs. 19, 20, 29, and 30 be classed as mineral lands.

John R. Stewart
Samby Stewart

Instrumentmen F.I.O.

FINAL OATHS OF DEPUTY SURVEYOR AND HIS ASSISTANTS.

LIST OF NAMES.

A list of the names of the individuals employed by
 United States Deputy Surveyor, to assist in running, measuring, and
 marking the lines and corners described in the foregoing field notes of the survey of
 showing the respective capacities in which they acted:

....., Chainman.
 or lists or names and final oaths of assistants see book "J", Chainman.
 T. 32 S., R. 6 W., Moundman.
 , Moundman.
 , Axman.
 , Axman.
 , Flagman.

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted
 United States Deputy Surveyor, in surveying all
 those parts or portions of the

..... of the
 meridian, of which are represented
 in the foregoing field notes as having been surveyed by him and under his direction; and that said survey
 has been in all respects, to the best of our knowledge and belief, well and faithfully surveyed, and the
 corner monuments established, according to the instructions furnished by the United States Surveyor
 General for

....., Chainman.
 , Chainman.
 , Moundman.
 , Moundman.
 , Axman.
 , Axman.
 , Axman.
 , Flagman.

Subscribed and sworn to before me this }
 day of , 190 }



28

FINAL OATH OF UNITED STATES DEPUTY SURVEYOR.

I, _____, United States Deputy Surveyor, do solemnly swear that, in pursuance of a contract received from _____, United States Surveyor General for _____, bearing date of the _____ day of _____, 190_____, I have well, faithfully, and truly, in my own proper person, and in strict conformity with the instructions furnished by the United States Surveyor General for _____, the Manual of Surveying Instructions, and the laws of the United States, surveyed all those parts or portions of _____.

For final oaths of ~~Transitmen~~ see book "Z¹²" T. 31 S., R. 9 W.

_____ of the _____ meridian, in the _____ of _____, which are represented in the foregoing field notes as having been surveyed by me, and under my direction; and I do further solemnly swear that all the corners of said survey have been established and perpetuated in strict accordance with the Manual of Surveying Instructions, and the special written instructions of the United States Surveyor General for _____ and in the specific manner described in the field notes, and that the foregoing are the original field notes of such survey.

United States Deputy Surveyor

Subscribed by said _____, and sworn to before me }
this _____ day of _____, 190 }



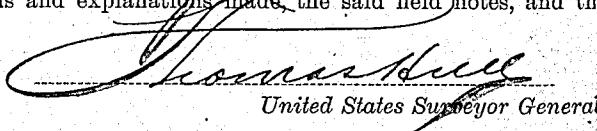
APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Salt Lake City, Utah, January 7, 1914, ~~190X~~

The foregoing field notes of the survey of the subdivisional lines of Township No. 33 South, Range No. 7 West of the Salt Lake Base and Meridian, Utah,

executed by John R. Stewart and Quinby Stewart
their special instructions under his contract No. _____, dated August 6, 1910, ~~190X~~, having been critically examined, and the necessary corrections and explanations made, the said field notes, and the surveys they describe, are hereby approved.


Thomas H. Bell
United States Surveyor General

I certify that the foregoing transcript of the field notes of the above-described surveys in _____, has been correctly copied from the original notes on file in this office.

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4-679.

G.

BOOK A-384

FILED

FEB 11 1911

FIELD NOTES

K.J.B.

OF THE SURVEY OF THE

NORTH BOUNDARY

and

RETRACEMENT

EAST WEST AND NORTH BOUNDARIES

of

Township No. 32 South, Range No. 7 West,

Of the Salt Lake Base, and Meridian,

State of Utah.

AS SURVEYED BY

John R. Stewart and Quinby Stewart U.S. Surveyors

Assignment Group No. 1

Under his Contract No. , dated August 6, 1910. \$100

Survey commenced September 25, 1910. \$100

Survey completed October 7, 1910. \$100

6-161

Actu. E.D. 6-00-89
 - " 72. " 1-00-03 n. July 2-01-50
 " 6" 2-02-03 5-4

NAMES AND DUTIES OF ASSISTANTS.

Frank S. Allen, Chainman.

R. Bert Carter, Chainman.

Ruban W. Riley, Moundman.

Isaac R. Hayes, Axman.

Verne O. Nelson, Chainman.

Alton Ivie, Chainman.

Harvey W. Elliott, Moundman.

Nicholas L. Sheffield, Axman.

Milo Nelson, Flagman.

6-161

For preliminary oaths see Bdys.T.33 S.,R.8 W.book "C"

For Final Oaths see Bdys.T.32 S.,R.6 W. , book "I"

BOOK A-384

INDEX DIAGRAM.

Township 32 South, Range 7 West

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15 31	32	33	34	35	36	2

Meanders Page.....

PRELIMINARY OATHS OF ASSISTANTS.

We,

and

do solemnly swear that we will well and faithfully execute the duties of chainmen; that we will level the chain upon even and uneven ground, and plumb the tally pins, either by sticking or dropping the same; that we will report the true distances to all notable objects, and the true lengths of all lines that we assist in measuring, to the best of our skill and ability, and in accordance with instructions given us, in the survey

, Chainma

, Chainma

Subscribed and sworn to before me this }
day of , 190 }



We,

and

do solemnly swear that we will well and truly perform the duties of moundmen in the establishment of corners, according to the instructions given us, to the best of our skill and ability, in the survey

, Moundma

, Moundma

Subscribed and sworn to before me this }
day of , 190 }



We,

and

do solemnly swear that we will well and truly perform the duties of axmen in the establishment of corners and other duties, according to instructions given us, to the best of our skill and ability, in the survey

, Axmen

, Axmen

Subscribed and sworn to before me this }
day of , 190 }



I, , do solemnly swear that I will well and truly perform the duties of flagman according to instructions given me, to the best of my skill and ability, in the survey of

, Flagman

Subscribed and sworn to before me this }
day of , 190 }



Retracement East bdy.T.32 S.,R.7 W.

Survey commenced September 25, 1910, and executed with a W. and L.E. Gurley Explorer's transit, No. 957, with solar attachment. The horizontal limb is provided with two double verniers placed opposite to each other, reading to single minutes of arc; which is also the least count of the latitude and declination arcs.

The instrument was examined, tested on the meridian at Salt Lake City, found correct and was approved by the surveyor general for Utah, on August 6, 1910.

I examine the adjustments of the instrument and correct the level and collimation errors; then, to test the solar apparatus by comparing its indications resulting from solar observations made during p.m. and a.m. hours with a meridian established by Polaris observation, I proceed as follows.

At the cor. of Tps. 32 and 33 S., Rs. 6 and 7 W., latitude $37^{\circ} 59' 04''$ N., longitude $112^{\circ} 33' 13''$ W., I set off $37^{\circ} 59' N.$, on the lat. arc; $0^{\circ} 46' S.$, on the decl. arc; and at 3 h 52 m p.m., l. m.t., I determine a meridian with the solar, and mark a point thereof on a stone firmly set in the ground, 5.00 chs. N. of the cor.

At 7 h 17. m p.m., l.m.t., I observe Polaris at eastern elongation, in accordance with the Manual, and mark a point in the line thus determined by a tack driven in a wooden plug set in the ground, 5.00 chs. N. of the cor.

September 25, 1910.

September 26, 1910: At 7 h 30 m a.m., l.m.t., I lay off the azimuth of Polaris $1^{\circ} 29.4'$ to the west and mark a point in the meridian thus determined, by cutting a small groove in the stone already set 5.00 chs. N. of the cor.; this mark falls 0.36 ins. east of the meridian determined by the solar.

Retracement East bdy.T.32 S., R.7 W.-Continued.

Chains

At 7 h 52 m a.m., l.m.t., I set off $37^{\circ}59'N.$, on the lat. arc; $1^{\circ}02'S.$, on the decl. arc; and determine a meridian with the solar, and mark a point thereof by a cross on the stone already set 5.00 chs. N. of the cor.; this mark falls 0.29 ins. east of the meridian established by Polaris observation.

The solar apparatus by p.m. and a.m. observations defines positions for meridians respectively about $0'19''$ west and $0'15''$ east of the meridian established by Polaris observation; therefore I conclude that the adjustments of the instrument are satisfactory.

The magnetic bearing of the meridian at 8 h 30 m a.m., l.m.t., is N. $15^{\circ}58'W.$, the angle thus determined gives the mag decl. $15^{\circ}58'E.$

From the cor. of Tps. 32 and 33 S., Rs. 6 and 7 W., heretofore described.

I run

North, on retracement line bet. secs. 31 and 36.

Over mountainous land; through dense mahogany and oak brush and scattering cedar and pinon pine timber.

Asc.

15.00 Top of spur, 100 ft. above cor., bears NW and SE.

Desc.

21.00 Head of hollow, 30 ft. below spur, course S. $30^{\circ}E.$

Asc.

26.20 Top of main ridge, 150 ft. above hollow, bears NE and SW. Leave timber; bears NE and SW.

Desc.

38.81 Intersect $\frac{1}{4}$ sec. cor. bet. secs. 31 and 36, which is a granite stone, 11x12x6 ins., above ground, firmly set, and md. and witnessed as described by the surveyor general.

I destroy the old cor. and re-establish it in the same

Retracement East bdy. C. T. 32 S., R. 7 W.-Continued.

Chains

place as follows:

Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for $\frac{1}{2}$ sec. cor.. mkd. on brass cap $\frac{1}{2}$ S 36 in W half and S 31 in E half; from which

A white pine, 14 ins. dia., bears S. 50° E., 80 lks. dist.. mkd. $\frac{1}{2}$ S 31 B T.

No other trees within limits; raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. ✓

52.50 Bottom of hollow, 400 ft. below ridge, course N. 40° E.
Asc.

64.00 Top of spur, 50 ft. above hollow, bears E. and W.
Desc.

78.28 Intersect cor. of secs. 25, 30, 31, and 36, which is a granite stone, 9x10x6 ins., above ground, firmly set, and mkd. and witnessed as described by the surveyor general.

I destroy the old cor. and re-establish it in the same place as follows:

Set an iron post, 3 ft. long, 3 ins. in dia., 24 ins. in the ground, for cor. of secs. 25, 30, 31, and 36, mkd. on brass cap

T 32 S in N. half.

R 7 W S 25 in NW.

R 6 W S 30 in NE.

S 31 in SE.; and

S 36 in SW. quadrants; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. ✓

The course of this mile is therefore North 78.28 chs.

S. 26.20 chs. on S. slope of high ridge draining southeast into Bear valley and thence northeasterly into Sevier River; Soil, clay mixed with shale about 6 ins. deep. Timber cedar and pinon pine (scattering); Undergrowth, dense mahogany, oak, service berry, and buck brush.

N. 52.08 chs. on N. and NW. slope of ridge, and drains NW into Buckskin Valley and thence into Parowan valley. Soil, rich black loam about 2 ft. deep, subsoil clay. No timber except

Retracement East bdy.T.32 S., R.7 W.-Continued.

- Chains a few pine trees near the $\frac{1}{2}$ sec.cor.Undergrowth,oak, buck, and sage brush.
- Mountainous land, or land covered with dense undergrowth, 78.28 chs.
- September 26, 1910: At this cor. I set off $1^{\circ}06' E.$, on the decl.arc; and at 11 h 52 m a.m., l.m.t., I observe the sun on the meridian, the resulting lat. is $38^{\circ} 00' N.$, which is the proper lat.nearly.
-
- North, on tetrasement line betsecs.25 and 30.
- Over mountainous land, through dense sage and oak brush
- Desc.
- 9.00 Bottom of hollow, 100 ft. below sec.cor., course NE.
- Asc.
- 23.00 Top of spur, 150 ft. above hollow, bears E. and W.
- Desc.
- 40.00 Fall 2 lks. East of the $\frac{1}{4}$ sec.cor.betsecs.25 and 30, which is a granite stone, $7 \times 10 \times 6$ ins., above ground, firmly set, and mkd.and witnessed as described by the surveyor general.
- 55.75 Bottom of hollow, 250 ft. below spur, course N. $30^{\circ} E.$
- Asc.
- 72.00 Top of ridge, 75 ft. above hollow, bears N. $35^{\circ} W.$ and S. $35^{\circ} E.$
- Desc.
- 80.00 Fall 5 lks. East of the cor.of secs.19,24,25, and 30, which is a granite stone, $7 \times 12 \times 6$ ins., above ground, firmly set, and mkd.and witnessed as described by the surveyor general.
- I destroy the old cor.and re-establish it in the same place as follows:
- Set an iron post, 3 ft.long, 3 ins.in dia., 24 ins.in the ground, for cor.of secs.19,24,25, and 30,mkd.on brass cap

Retracement East bdy.T.32 S., R.7 W.-Continued.

Chains	T 32 S in N half. R 7 W S 24 in NW. R 6 W S 19 in NE. S 30 in SE.; and S 25 in SW. quadrants; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. Therefore the course of this line is N.0°2'W., 80.00 chs. Land, rolling hills in south end of Buckskin valley. Soil, black loam, well mixed with cobble rock, about 2 ft. deep, Subsoil, clay. No timber. Undergrowth, oak and sage brush. Mountainous land, or land covered with dense undergrowth, 80.00 chs.
	North, on a retracement line bet. secs. 19 and 24. Over rolling hills; through dense sage brush. Desc.
40.70	Intersect $\frac{1}{4}$ sec. cor. bet. secs. 19 and 24, which is a granite stone, 9x9x6 ins. above ground, firmly set, and mkd. and wit- nessed as described by the surveyor general; I raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.
64.40	Trail, bears NW and SE. Foot of descent, bears NW and SE. Enter Buckskin valley.
68.00	Wash, 40 lks. wide, 4 ft. deep, course NW. Asc. gently.
81.01	Fall 14 lks. East of the cor. of secs. 13, 18, 19, and 24, which is a granite stone, 9x6x6 ins. above ground, firmly set, and mkd. and witnessed as described by the surveyor general. I raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. The course of the south half of this mile is therefore North 40.70 chs.; the north half is N.0°12'W., 40.31 chs.

Retracement East bdy. T.32 S., R.7 W.-Continued.

Chains

S.64.40 chs.in foot hills in south end of Buckskin valley.
 Soil, black loam well mixed with cobble rock, could not be ploughed. Soil, about 2 ft. deep, subsoil, clay. No timber.
 Undergrowth, sage brush. N.16.61 chs. in nearly level valley
 Soil, rich black loam about 2 ft. deep, but too rocky to be cultivated. No timber. Undergrowth, sage brush. Good grass.
 Mountainous land, or land covered with dense undergrowth.
 81.01 chs.

September 26, 1910.

September 27, 1910: At 7 h 51 m a.m., l.m.t., I set off 38° 02' N., on the lat. 1° 25' S., on the decl. arc; and determine a meridian with the solar, at the cor. of secs. 13, 18, 19, and 24.

Thence I run

North, on a retracement line bet. secs. 13 and 18.

Over nearly level land in Buckskin valley; through dense sage brush.

39.92 Intersect $\frac{1}{4}$ sec. cor. bet. secs. 13 and 18, which is a granite stone, 8x12x7 ins., above ground, firmly set, and mkd. and witnessed as described by the surveyor general.

I destroy the old cor. and re-establish it in the same place as follows:

Set an iron post, 3 ft. long. 1 in dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor.. mkd. on brass cap $\frac{1}{2}$ S 13 in W half and S 18 in E half; dig pits, 18x18x12 ins. N. and S. of post, 3 ft. dist.; and raise a mound of earth, $3\frac{1}{2}$ ft./base, $1\frac{1}{2}$ ft. high, W. of cor.

79.80 Intersect the cor. of secs. 7, 12, 13, and 18, which is a granite stone, 11x10x5 ins., above ground, firmly set, and mkd. and witnessed as described by the surveyor general
 I destroy the old cor. and re-establish it in the same

Retracement East bdy. T.32 S., R.7 W.-Continued.

Chains place as follows:

Set an iron post, 3 ft. long, 3 ins. in dia., 24 ins. in the ground, for cor. of secs. 7, 12, 13, and 18, mkd. on brass cap

T 32 S in N half

R 7 W S 12 in NW.

R 6 W S 7 in NE.

S 18 in SE.; and

S 13 in SW quadrants; dig pits, 18x18x12 ins., in each sec. $5\frac{1}{2}$ ft. dist.; and raise a mound of earth, 4 ft. base, 3 ft. high, W. of cor. ✓

The course of this line is therefore North 79.80 chs. Land, nearly level valley.

Soil, sandy loam about 2 ft. deep, subsoil, gravel.

No timber.

Undergrowth, sage brush.

Good grass for grazing.

Land covered with dense undergrowth, 79.80 chs.

September 27, 1910: At this cor. I set off 1°30' S., on the decl. arc; and at 11 h 51 m a.m., l.m.t., I observe the sun on the meridian, the resulting lat. is 38°03' N., which is the proper lat. nearly.

North, on a retracement line bet. secs. 7 and 12.

Over nearly level land in Buckskin Valley; through dense sage brush.

2.25 Wash, 30 lks. wide, 3 ft. deep, course NW.

39.90 Intersect the $\frac{1}{4}$ sec. cor. bet. secs. 7 and 12, which is a cedar post, 4 ins. sq; and projects 3 ft. above ground, firmly set, and mkd. and witnessed as described by the surveyor general. The post greatly decayed and marks almost obliterated. I destroy the old cor. and re-establish it in the same place as follows:

Set an iron post, 3 ft. long, 1 in. in dia. 26 ins. in the ground, for $\frac{1}{4}$ sec. cor.. mkd. on brass cap $\frac{1}{4}$ S 12 in W half

Retracement E.bdy.T.32 S., R.7 W.-Continued.

Chains

and S 7 in E half; dig pits, 18x18x12 ins. N. and S. of post, 3 ft. dist.; and raise a mound of earth, $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high, N. of cor.

81.58 Fall 73 lks. west of cor. of secs. 1, 6, 7, and 12, which is a granite stone, 5x10x4 ins., above ground, firmly set, and mkd. and witnessed as described by the surveyor general. I destroy the old cor. and re-establish it in the same place as follows.

Set an iron post, 3 ft. long, 3 ins. dia., 24 ins. in the ground, for cor. of secs. 1, 6, 7, and 12, mkd. on brass cap

T 32 S in N half.

R 7 W S 1 in NW.

R 6 W S 6 in NE.

S 7 in SE.; and

S 12 in SW. quadrants; dig pits, 18x18x12 ins. in each sec. $5\frac{1}{2}$ ft. dist.; and raise a mound of earth, 4 ft. base, 2 ft. high, N. of cor.

The course of the south half of this mile is therefore North 39.90 chs.; the north half is N.1°00'E., 41.68 chs. Land, nearly level valley.

Soil, sandy loam, rich and soft, mixed with some rock, sub-soil, gravel.

No timber.

Undergrowth, sage brush.

Land covered with dense undergrowth, 81.68 chs.

North, on retracement line bet. secs. 1 and 6.

Over nearly level land in Buckskin valley; through dense sage brush.

40.27 Fall 2 lks. W. of the $\frac{1}{2}$ sec. cor. bet. secs. 1 and 6, which is a granite stone, 7x8x6 ins., above ground, firmly set, and mkd. and witnessed as described by the surveyor general.

Retracement E.bdy.T.32 S.,R.7 W.-Continued.

Chains

I destroy the old cor.and re-establish it in the same place as follows:

Set an iron post,3 ft.long,1 in.in dia.,26 ins.in the ground,for $\frac{1}{2}$ sec.cor..mkd.on brass cap $\frac{1}{2}$ S 1 in W half and S 6 in E half;dig pits,18x18x12 ins.?H.and S.of post,3 ft.dist.;and raise a mound of earth, $3\frac{1}{2}$ ft.base, $1\frac{1}{2}$ ft.high,W.of cor.

80.22 Fall 19 lks.West of the cor.of Tps.31 and 32 S.,Rs.6 and 7 W.,which is a granite stone,9x12x8 ins.,above ground,firmly set, and mkd.and witnessed as described by the surveyor general.

I destroy the old cor.and re-establish it in the same place as follows:

Set an iron post,3 ft.long,3 ins.dia.,24 ins.in the ground,for cor.of Tps.31 and 32 S.,Rs.6 and 7 W.,mkd.on brass cap.

T 31 S in N half.

T 32 S in S half.

R 7 W S 36 in NW.

R 6 W S 31 in NE.

R 6 W S 6 in SE.;and

R 7 W S 1 in SW.quadrants;dig pits,24x24x12 ins.on each line,N.,E.,and W.,4 ft.,and S.of post,8 ft.dist.;and raise a mound of earth,5 ft.base. $2\frac{1}{2}$ ft.high,S.of cor.The course of the south half of this line is therefore N. $0^{\circ}2' E.$,40.27 chs.and the north half is N. $0^{\circ}15' E.$,39.95 chs.

Land,nearly level valley.

Soil,sandy and clay loam,rich,medium texture,mixed with considerable rock.soil about 2 ft.deep,subsoil,gravel.

No timber.

Undergrowth,sage brush.

Good grass for grazing.

Land covered with dense undergrowth,80.22 chs.

Retracement East bdy.T.32 S., R.7 W.-Continued.

Chains

John R Stewart

For test of instrument see notes of Sub.T.32 S., R.7 W.

Retracement North bdy.T.32 S., R.7 W.

October 6, 1910: At 7 h 48 m a.m., l.m.t., I set off $38^{\circ}04'N.$, on the lat.arc; $4^{\circ}54'S.$, on the decl.arc; and determine a meridian with the solar, at the cor.of secs.3, 4, 33, and 34, on N.bdy.of Tp.herebefore described.

Thence I run

East, on a retracement line bet.secs.3 and 34.

Over mountainous land; through heavy timber and dense sage brush.

Asc.

30.00 Top of spur, 100 ft. above cor., bears $N.20^{\circ}W.$ and $S.20^{\circ}E.$

Desc.

39.00 Bottom of swale, 50 ft. below spur, course $N.15^{\circ}W.$

Asc.

39.72 Fall 30 lks. South of the $\frac{1}{4}$ sec.cor.bet.secs.3 and 34, which is a cedar, 5 ins.dia., mkd. and witnessed as described by the surveyor general. The tree is dead; I therefore destroy the cor. and re-establish it in the same place as follows:

Set an iron post, 3 ft.long, 1 in.in dia., 26 ins.in the ground, for $\frac{1}{4}$ sec.cor.. mkd.on brass cap $\frac{1}{4}$ S 34 in N half and S 3 in S.half; from which

A cedar, 8 ins.dia., bears $N.72^{\circ}W.$, 48 lks.dist..mkd. $\frac{1}{4}$ S 34 B T.A pinon pine, 6 ins.dia., bears $S.9^{\circ}W.$, 55 lks.dist..mkd. $\frac{1}{4}$ S 3 B T.41.25 Top of spur, 50 ft. above hollow, bears $N.15^{\circ}W.$ and $S.15^{\circ}E.$
Desc.

54.80 Bottom of hollow, 50 ft. below spur, course N.

Asc.

69.50 Top of spur, 70 ft. above hollow, bears $N.10^{\circ}W.$ and $S.10^{\circ}E.$
Desc.

Retracement N.bdy.T.32 S., R.7 W.-Continued.

Chains

79.60 Bottom of hollow, 50 ft. below spur, course N.10°W.

Asc.

80.03 Fall 47 lks. S. of the cor. of secs. 2, 3, 34, and 35, which is a cedar, 24 ins. dia., mkd. and witnessed as described by the surveyor general. The tree is dead and partly decayed. Therefore I destroy the old cor. and re-establish it in the same place as follows:

Set an iron post, 3 ft. long, 3 ins. in dia., 24 ins. in the ground, for cor. of secs. 2, 3, 34, and 35, mkd. on brass cap

T 31 S S 34 in NW.

R 7 W S 35 in NE.

R 7 W S 2 in SE.; and

T 32 S S 3 in SW. quadrants; from which

A pinon pine, 10 ins. dia., bears N.86°E., 32 lks.

dist..mkd.T 31 S R 7 W S 35 B T.

A cedar, 8 ins. dia., bears S.45°E., 4 lks. dist..mkd.

T 32 S R 7 W S 2 B T.

A cedar, 6 ins. dia., bears S.43°W., 3 lks.

dist..mkd.T 32 S R 7 W S 3 B T.

A pinon pine, 10 ins. dia., bears N.75°W., 43 lks.

dist..mkd.T 31 S R 7 W S 34 B T.

The course of the west half of this line is therefore N.89°34'E. 39.72 chs. and the east half is N.89°45'E., 40.31 chs.

Land, mountainous, somewhat rolling and covered with cobble rock and sandstone.

Soil, sandy loam; about 2 ft. deep, subsoil, gravel.

Timber, cedar and pinon pine.

Undergrowth, sage brush.

Good grass for grazing.

Mountainous or heavily timbered land, or land covered with dense undergrowth, 80.03 chs.

October 6, 1910: At this cor. I set off 4°59'N., on the decl. arc; and at 11 h 48 m a.m., l.m.t., I observe the sun on

Retracement N.bdy.T.32 S., R.7 W.-Continued.

the meridian, the resulting lat. is $38^{\circ}04'N.$, which is the proper lat. nearly.

North bdy.T.32 S., R.7 W.

From the cor.of Tps.31 and 32 S., Rs.6 and 7 W., heretofore described,

I run

West, on a random line along the North bdy.of Tp., setting temp. $\frac{1}{4}$ sec. and sec.cors. at intervals of 40.00 chs., and at 161.50 chs. Fall 5.45 chs. South of the cor.of secs. 2, 3, 34, and 35, heretofore described.

The falling being out of limits, it becomes necessary to begin at the cor.of secs. 2, 3, 34, and 35 and run East on true line.

October 6, 1910.

October 7, 1910: At 7 h 48 m a.m., l.m.t., I set off $38^{\circ}04'$ N. on the lat.arc; $5^{\circ}17'S.$, on the decl.arc; and determine a meridian with the solar, at the cor.of secs. 2, 3, 34, and 35, on N.bdy.of Tp.,

Thence I run

East, on a true line bet.secs. 2 and 35.

Over mountainous land; through heavy cedar and pinon pine timber and dense sage brush.

Asc.

11.50 Top of spur, 50 ft. above cor. m bears N.10°W. and S.10°E.
Desc.

19.50 Bottom of swale, 60 ft. below spur, course N.
Asc.

24.80 Top of spur, 60 ft. above swale, bears N. and S.

N.bdy.T.32 S., R.7 W.-Continued.

Chains	
	Desc.
28.60	Bottom of swale, 30 ft. below spur, course N. Asc.
30.75	Top of spur, 75 ft. above swale, bears N. and S. Leave timber, bears N. and S.
	Desc.
40.10	Bottom of hollow, 120 ft. below spur, course N. AAsc.
41.50	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for $\frac{1}{4}$ sec.cor..mkd.on brass cap $\frac{1}{4}$ S 35 in N half and S 2 in S half; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, N.of cor.
54.50	Top of spur, 150 ft. above hollow, bears N. and S. Desc.through scattering timber.
81.50	Set an iron post, 3 ft. long, 3 ins.in dia., 24 ins.in the ground, for cor.of secs.1,2,,35, and 36,mkd.on brass.cap T 31 S S 35 in NW. R 7 W S 36 in NE. R 7 W S 1 in SE.; and T 32 S S 2 in SW.quadrants; from which A pinon pine, 5 ins.dia., bears N.12°40'E., 63 lks. dist..mkd.T 31 S R 7 W S 36 B T. A pinon pine, 8 ins.dia., bears S.67°E., 69 lks. dist..mkd .T 32 S R 7 W S 1 B T. A pin n pine, 6 ins.dia., bears S.37°30'W., 18 lks dist..mkd.T 32 S R 7 W S 2 B T. A pinon pine, 6 ins.dia., bears N.77°30'W., 21 lks. dist..mkd.T 31 S R 7 W S 35 B T. Land , rolling mountains sloping westerly into Parowan valley. Soil,sandy clay loam about 2 ft.deep,clay subsoil. Timber,cedar and pinon pine. Undergrowth,sage brush. A very little grass . Mountainous or heavily timbered land,or land covered

H.bdy.T. #32 S., R.7 W.-Continued.

Chains

with dense undergrowth, 81.50 chs.

October 7, 1910: At this cor. I set off $5^{\circ}22'N.$, on the decl. arc; and at 11 h 48 m a.m., l.m.t., I observe the sun on the meridian the resulting lat. is $38^{\circ}04'N.$, which is the proper lat. nearly.

East, on a true line bet. secs. 1 and 36.

Over mountainous land; through scattering timber and dense undergrowth.

desc.

.40 Bottom of swale, 10 ft. below cor., course N. $20^{\circ}E.$

Asc.

9.50 Top of spur, 60 ft. above swale, bears N. $10^{\circ}E.$ and S. $10^{\circ}W.$

Desc.

15.50 Bottom of hollow, 90 ft. below spur, course N.

Asc.

22.50 Top of ridge, 90 ft. above hollow, bears N. and S.

Desc.

40.00 Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., mkd. on brass cap $\frac{1}{4}$ S 36 in N. half and S 1 in S half; from which

A pinon pine, 5 ins. dia., bears N. $58^{\circ}W.$, 81 lks.

dist.. mkd. $\frac{1}{4}$ S 36 B T.

A cedar, 6 ins. dia., bears S. $84^{\circ}W.$, 19 lks.

dist.. mkd. $\frac{1}{4}$ S 1 B T. ✓

55.00 Leave timber, bears N. $20^{\circ}W.$ and S. $20^{\circ}E.$

61.80 Wash, 20 lks. wide, 4 ft. deep, course N.

Foot of descent, bears N. and S.

Enter Buckskin Valley.

80.00 Intersect E.bdy. of Tp., 5.45 chs. North of the cor. of Tps. 31 and 32. S., Rs. 6 and 7 W.

Set an iron post, 3 ft. long, 3 ins. in dia., 24 ins. in the

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N. bdy. T. 32 S., R. 7 W.- Continued.

Chains

ground, for closing cor. of Tps. 31 and 32 S., R. 7 W.
mkd. on brass cap

T 31 S in N half

T 32 S in S half

R 6 W S 31 S 6 in E half

C C in E half,

R 7 W S 36 in NW.; and

R 7 W S 1 in SW. quadrants; and raise a mound of
stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.

Note: I destroy all marks on the cor. of Tps. 31 and
32 S., Rs. 6 and 7 W., which pertain to Tps. 31 and
32 S., R. 7 W.

W. 61.80 chs. over rolling mountains, covered with
loose volcanic boulders. Soil, clay loam about 12
ins. deep, mixed with rock; subsoil, clay and gravel.

Timber, cedar and pinon pine. Undergrowth, sage brush.

E. 18.20 chs. over nearly level valley. Soil, black
loam about 3 ft. deep. No timber. Undergrowth,
sage brush.

Mountainous or heavily timbered land, or land covered
with dense undergrowth, 80.00 chs.

October 7, 1910.

Instrumentman G.L.O.

RETRACEMENT W. BDY. T. 32 S., R. 7 W.

October 1, 1910: At 7h 50m a.m. l.m.t., I set off
 $37^{\circ} 59' N.$ on lat. arc; $2^{\circ} 58' S.$, on the decl. arc;
and determine a meridian with the solar at the cor. of
Tps. 32 and 33 S., Rs. 7 and 8 W.

Thence I run

North on retrace line bet. secs. 31 and 36

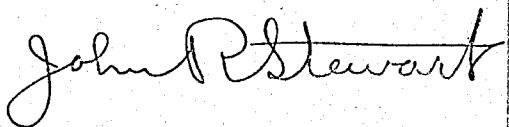
Retracement W. bdy. T. 32 S., R. 7 W.

Chains

- 41.31 Fall 31 lks. E. of the $\frac{1}{4}$ sec.cor., which is a conglomerate stone 5x10x6 ins. above ground, firmly set, and mkd. and witnessed as described by the surveyor general.
- 81.69 Fall 62 lks. East of the cor. of secs. 25,30,31 and 36, which is a limestone 7x6x8 ins. above ground, mkd. and witnessed as described by the surveyor general.
The course of this line is N. $0^{\circ} 26'W.$, 81.69 chs.
No change in topography from old notes.

- North, on retrace ment line bet. secs. 25 and 30
- 40.25 Fall 22 lks. east of $\frac{1}{4}$ sec.cor., which is a conglomerate stone 10x10x8 ins. above ground, firmly set, and mkd. and witnessed as described by the surveyor general.
- 80.33 Fall 44 lks. east of cor. of secs. 19, 24, 25, and 30, which is a conglomerate stone 13x10x5 ins. above ground, firmly set, and mkd. and witnessed as described by the surveyor general.
The course of this line is N. $0^{\circ} 19'W.$ 80.33 chs.
No change in topography from old notes.

October 1, 1910.



Instrumentman G. L. O.

For general description see notes of the Sub.T.32 S.,
R.7 W.

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BOUNDARIES OF T. 32 S., R. 7 W.

Latitudes, Departures, and Closing Errors.

Line designated	True Bearing	Dist- ance	Latitudes		Departures	
			N. chs.	S. chs.	E. chs.	W. chs.
W.bdy.T.32 S.,R.7 W.	N. 0°26'W.	81.69	81.69	.....	.....	.62
W.bdy.T.32 S.,R.7 W.	N. 0°19'W.	80.33	80.33	.....	.....	.44
N.bdy.sec.30	East	80.73	.....	.....	80.73	.....
N.bdy.sec.29	N.89°57'E.	79.90	.07	.....	79.90	.....
E.bdy.sec.20	N. 0°03'E.	79.72	79.72	.....	.07	.....
E.bdy.sec.17	N. 0°15'E.	79.86	79.86	.....	.35	.....
E.bdy.sec.8	N. 0°03'E.	80.16	80.16	.....	.07	.....
N.bdy.sec.9	N.89°51'E.	79.52	.21	.....	79.52	.....
E.bdy.sec.4	N. 0°17'W.	41.65	41.65	.....	.....	.20
E.bdy.sec.4	N. 0°59'W.	42.20	42.19	.....	.....	.72
N.bdy.T.32 S.,R.7 W.	N.89°34'E.	39.72	.30	.....	39.72	.....
N.bdy.T.32 S.,R.7 W.	N.89°45'E.	40.31	.17	.....	40.31	.....
N.bdy.T.32 S.,R.7 W.	East	161.50	.....	.....	161.50	.....
E.bdy.T.32 S.,R.7 W.	South	5.45	.....	5.45	.....	.....
E.bdy.T.32 S.,R.7 W.	S. 0°15'W.	39.95	.....	39.95	.....	.17
E.bdy.T.32 S.,R.7 W.	S. 0°02'W.	40.27	.....	40.27	.....	.02
E.bdy.T.32 S.,R.7 W.	S. 1°00'W.	41.68	.....	41.67	.....	.73
E.bdy.T.32 S.,R.7 W.	South	39.90	.....	39.90	.....	.....
E.bdy.T.32 S.,R.7 W.	South	79.80	.....	79.80	.....	.....
E.bdy.T.32 S.,R.7 W.	S. 0°12'E.	40.31	.....	40.31	.14	.....
E.bdy.T.32 S.,R.7 W.	South	40.70	.....	40.70	.....	.....
E.bdy.T.32 S.,R.7 W.	S. 0° 2'E.	80.00	.....	80.00	.05	.....
E.bdy.T.32 S.,R.7 W.	South	78.28	.....	78.28	.....	.....
S.bdy.T.32 S.,R.7 W.	N.87°41'W.	39.15	1.08	.....	.....	39.14
S.bdy.T.32 S.,R.7 W.	N.89°17'W.	40.50	.50	.....	.....	40.50
S.bdy.T.32 S.,R.7 W.	S.88°22'W.	83.02	.....	2.37	.....	82.99
S.bdy.T.32 S.,R.7 W.	S.89°44'W.	80.47	.....	.37	.....	80.47
S.bdy.T.32 S.,R.7 W.	N.88°00'W.	38.66	1.35	.....	.....	38.64
S.bdy.T.32 S.,R.7 W.	S.89°58'W.	39.57	.....	.02	.....	39.57
S.bdy.T.32 S.,R.7 W.	S.89°47'W.	39.54	.....	.15	.....	39.54
S.bdy.T.32 S.,R.7 W.	N.88°58'W.	39.84	.73	.....	.....	39.83
S.bdy.T.32 S.,R.7 W.	N.89°54'W.	80.12	.14	.....	.....	80.12
Convergency					.43	
	Totals	490.15	489.24	482.79	483.70	
		489.24			482.79	
	Error in Lat.		.91			
	Error in Dep.					.91

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FINAL OATHS OF DEPUTY SURVEYOR AND HIS ASSISTANTS.

LIST OF NAMES.

A list of the names of the individuals employed by _____, United States Deputy Surveyor, to assist in running, measuring, and marking the lines and corners described in the foregoing field notes of the survey of _____

showing the respective capacities in which they acted:

_____, *Chainman.*
 For list of names and final oath of assistants see book, *Chainman.*
 "T" T. 32 S., R. 6 W. _____, *Moundman.*
 _____, *Moundman.*
 _____, *Axman.*
 _____, *Axman.*
 _____, *Flagman.*

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted _____, United States Deputy Surveyor, in surveying all those parts or portions of the _____ of the _____

meridian, _____ of _____, which are represented in the foregoing field notes as having been surveyed by him and under his direction; and that said survey has been in all respects, to the best of our knowledge and belief, well and faithfully surveyed, and the corner monuments established, according to the instructions furnished by the United States Surveyor General for _____

_____, *Chainman.*
 _____, *Chainman.*
 _____, *Moundman.*
 _____, *Moundman.*
 _____, *Axman.*
 _____, *Axman.*
 _____, *Flagman.*

Subscribed and sworn to before me this _____
 day of _____, 1900 }



FINAL OATH OF UNITED STATES DEPUTY SURVEYOR.

I, _____, United States Deputy Surveyor, do solemnly swear that, in pursuance of a contract received from _____, United States Surveyor General for _____, bearing date of the day of _____, 190_____, I have well, faithfully, and truly, in my own proper person, and in strict conformity with the instructions furnished by the United States Surveyor General for _____, the Manual of Surveying Instructions, and the laws of the United States, surveyed all those parts or portions of _____.

For final oaths of transitmen see books "I" T.32 S.R.6 W. and "Z" T.31 S.R.9 W.

of the _____ meridian, in the _____ of _____, which are represented in the foregoing field notes as having been surveyed by me, and under my direction; and I do further solemnly swear that all the corners of said survey have been established and perpetuated in strict accordance with the Manual of Surveying Instructions, and the special written instructions of the United States Surveyor General for _____ and in the specific manner described in the field notes, and that the foregoing are the original field notes of such survey.

United States Deputy Surveyor.

Subscribed by said _____, and sworn to before me }
this _____ day of _____, 190 }

SEAL

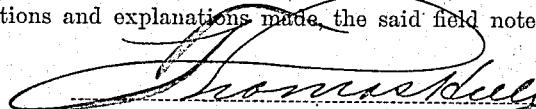
APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Salt Lake City, Utah, January 7, 1914.

The foregoing field notes of the survey of _____ the north, and retracement of the east, west, and north boundaries of Township No. 32 South, Range No. 7 west of the Salt Lake Base and Meridian, Utah,

executed by John R. Stewart and Quinby Stewart under his contract No. special instructions dated Aug. 6, 1910, 190_____, having been critically examined, and the necessary corrections and explanations made, the said field notes, and the surveys they describe, are hereby approved.


John R. Stewart
United States Surveyor General.

I certify that the foregoing transcript of the field notes of the above-described surveys in _____, has been correctly copied from the original notes on file in this office.

United States Surveyor General.

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4-679.

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BOOK A-384

FIELD NOTES

OF THE SURVEY OF THE

SUBDIVISION

and

Retracement Subdivision

of

Township No. 32 South, Range No. 7 West

Of the Salt Lake Base and Meridian,

State of Utah

AS SURVEYED BY

U.S. Transitmen

John R. Stewart and Quinby Stewart, xxxxxxxxxxxxxxxxxxxxxxxxx

Assignment Group No. _____, dated August 6, 1910, xxx
Under his Contract No. 1, dated

Survey commenced September 29, 1910., xxx

Survey completed October 13, 1910., xxx

4-151

10-66-215
29-10-5

3669

NAMES AND DUTIES OF ASSISTANTS.

Frank S. Allen,

Chainman.

R. Bert Carter,

Chainman.

Ruben W. Riley

Moundman.

Isaac R. Hayes

Axman.

William Carter,

Flagman.

Maeser Dalley.

Flagman.

Verne O. Nelson,

Chainman.

Alton Ivie.

Chainman.

Harvey W. Elliott.

Moundman.

Nicholas L. Sheffield.

Axman.

Milo Nelson.

Flagman.

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For Preliminary affidavits see Sub. T.33 S., R. 8 W.

, book

For Final Affidavits see notes of Sub.T.32 S., R.6 W., book "J"

BOOK A-384

INDEX DIAGRAM.

Township 32 South, Range 7 West

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18	17	11	16	66	15	48	14
			65	64		48	35
10	20	9	21	63	22	46	28
8	6		61	60		45	33
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7	18		29		28		27
81	2	82	69	33	57	34	42
						35	30

Meanders Page.....

PRELIMINARY OATHS OF ASSISTANTS.

WE, _____ and _____

do solemnly swear that we will well and faithfully execute the duties of chainmen; that we will level chain upon even and uneven ground, and plumb the tally pins, either by sticking or dropping the same; we will report the true distances to all notable objects, and the true lengths of all lines that we assist measuring, to the best of our skill and ability, and in accordance with instructions given us, in the survey

, Chainm

, Chainm

Subscribed and sworn to before me this _____ }
day of _____, 190 }



WE, _____ and _____

do solemnly swear that we will well and truly perform the duties of moundmen in the establishment of corners, according to the instructions given us, to the best of our skill and ability, in the survey

, Moundm

, Moundm

Subscribed and sworn to before me this _____ }
day of _____, 190 }



WE, _____ and _____

do solemnly swear that we will well and truly perform the duties of axmen in the establishment of corn and other duties, according to instructions given us, to the best of our skill and ability, in the survey

, Axm

, Axm

Subscribed and sworn to before me this _____ }
day of _____, 190 }



I, _____, do solemnly swear that I will well and truly perform the duties of flagman according to instructions given me, to the best of my skill and ability, in the survey of _____

, Flagm

Subscribed and sworn to before me this _____ }
day of _____, 190 }



Retracement Subdivision T.32 S., R.7 W.

Survey commenced September 29, 1910, and executed with a W. and L.E. Gurley Explorer's transit, No. 957, with solar attachment. The horizontal limb is provided with two double verniers placed opposite to each other, reading to single minutes of arc; which is also the least count of the verniers of the latitude and declination arcs.

The instrument was examined, tested on the meridian at Salt Lake^{City}, found correct, and was approved by the surveyor general for Utah, on August 6, 1910.

I examine the adjustments of the instrument and correct the level and collimation errors; then, to test the solar apparatus by comparing its indications resulting from solar observations made during p.m., and a.m. hours with a meridian established by Polaris observation, I proceed as follows:

At the cor. of secs. 31 and 32, on S. bdy. of Tp., latitude $37^{\circ}59'04''N.$, longitude $112^{\circ}38'44''W.$, I set off $37^{\circ}59'N.$, on the lat. arc; $2^{\circ}25'S.$, on the decl. arc; and at 4 h 51 m p.m., l.m.t., I determine a meridian with the solar, and mark a point thereof on a stone firmly set in the ground, 5.00 chs.N. of the cor.

At 7 h 1.1 m p.m., l.m.t., I observe Polaris at eastern elongation in accordance with the Manual, and mark a point in the line thus determined by a tack driven in a wooden plug set in the ground, 5.00 chs.N. of the cor.

September 29, 1910.

September 30, 1910: At 7 h 30 m a.m., l.m.t., I lay off the azimuth of Polaris $1^{\circ}29.4'$ to the west and mark a point in the meridian thus determined by cutting a small groove in the stone already set 5.00 chs.N. of the cor.; this mark falls 0.30 ins. east of the meridian established by the

2
Retracement Sub.T.32 S., R.7 W.-Continued.

Chains solar. /
At 7 h 50 m a.m., 1 m.t., I set off $37^{\circ}59'N.$, on the lat. arc; $2^{\circ}35'N.$, on the decl. arc; and mark the meridian determined by the solar, by a cross on the stone already set 5.00 chs. N. of the cor.; this mark falls 0.39 ins. east of the meridian established by Polaris observation.
The solar apparatus by p.m. and a.m. observations defines positions for meridians respectively about $0^{\circ}16'$ west and $0^{\circ}21'$ east of the meridian established by Polaris observation; therefore I conclude that the adjustments of the instrument are satisfactory.
The mag. decl. at 8 h 30 m a.m., is $N.15^{\circ}57'W.$, the angle thus determined gives the mag. decl. $15^{\circ}57'E.$

Note: In connection with the survey of the subdivision of this township I find it necessary to retrace some of the old lines joining the new work.

From the cor. of secs. 31 and 32, heretofore described I run

North, on a retracement line bet. secs. 31 and 32.

Over mountainous land; through heavy timber and scattering undergrowth. Desc.

- 2.00 Top of ridge, bears NW. and SE.
15.00 Bottom of hollow, 70 ft. below cor., course NW.
Asc.
19.60 Top of ridge, 30 ft. above hollow, bears NW and SE.
Desc.
22.50 Bottom of swale, 60 ft. below ridge, course $N.55^{\circ}W.$
Asc.
31.10 Top of ridge, 40 ft. above swale, bears $N.65^{\circ}W.$ and $S.65^{\circ}E.$
Desc.
39.60 Fall 7 lks. W. of the $\frac{1}{4}$ sec. cor. bet. secs. 31 and 32, which

Retracement Subdivision T.33 S., R.7 W.-Continued.

Chains

is an iron stone, 8x10x5 ins., above ground, firmly set, and mkd. as described by the surveyor general; the bearing trees have been cut down. I destroy the old cor. and re-establish it in the same place as follows.

Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor.. mkd. on brass cap $\frac{1}{4}$ S 31 in W half; and S 32 in E half; dig pits, 18x18x12 ins. N. and S. of post, 8 ft. dist. and raise a mound of earth, $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high, W. of cor. ✓

40.50 Bottom of hollow, 40 ft. below ridge, course NW.

Asc.

46.20 Top of spur, 60 ft. above hollow, bears N.80°W. and S.80°E.

Desc.

62.00 Wood road, bears N.80°W. and S.80°E.

63.00 Bottom of swale, 60 ft. below spur, course N.80°W.

Asc.

74.00 East edge of prominent butte on top of ridge, 150 ft. above hollow, the butte is about 40 ft. high, ridge bears N.85°W. and S.85°E.

Desc.

82.19 Fall 14 lks. West of the cor. of secs. 29, 30, 31, and 32, which is an iron stone, 8x20x6 ins., above ground, witnessed as described by the surveyor general, but improperly marked. I therefore destroy the old cor. and re-establish it in the same place as follows:

Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground, for cor. of secs. 29, 30, 31, and 32, mkd. on brass cap

T 32 S S 30 in NW.

R 7 W S 29 in NE.

S 32 in SE.; and

S 31 in SW. quadrants; from which

A cedar, 4 ins. dia., bears N.72°E., 45 lks.

dist.. mkd. T 32 S R 7 W S 29 B T.

A pinon pine, 6 ins. dia., bears S.33°E., 9 lks.

dist.. mkd. T 32 S R 7 W S 32 B T.

Retracement Sub T.32 S., R.7 W.-Continued.

Chains

A pinon pine, 5 ins. dia., bears S.72°W., 56 lks.

dist..mkd.T 32 S R 7 W S 31 B T.

A pinon pine, 5 ins. dia., bears N.73°W., 57 lks.

dist..mkd.T 32 S R 7 W S 30 B T.

The course of this line is therefore N.0°6'E., 82.19 chs.

Land, mountainous.

Soil, clay loam mixed with gravel. Clay subsoil.

Timber, cedar and pinon pine.

Undergrowth, oak and sage brush.

A very little grass.

Mountainous or heavily timbered land, 82.19 chs.

North, on a retracement line bet.secs.29 and 30.

Over mountainous land; through heavy timber and scattering undergrowth.

Desc.

6.10 Cottonwood Creek, 3 lks.wide, 2 ins.deep, in bottom of Cottonwood canon, 75 ft.below cor., course N.80°W.

Asc.

16.30 Top of ridge, 50 ft.above canon, bears E.and W.

Desc.

19.50 Wood.road, bears N.80°E.and S.80°W.

Bottom of hollow, 30 ft.below ridge, course S.80°W.

Asc.

32.25 Top of ridge, 30 ft.above hollow, bears N.80°E.and S.80°W.

Desc.

34.50 Wash, 20 lks.wide, 10 ft.deep, course S.80°W.in hollow, 30 ft.below ridge, course S.80°W.

Asc.

39.80 Top of ridge, 40 ft.above hollow, bears N.80°E.and S.80°W.

Desc.

40.20 Fall 14:lks.East of the sec.cor.bet.secs.29 and 30, which is a sandstone, 6x12x8 ins., above ground, firmly set,

Retracement Sub.T.32 S., R.7 W.-Continued.

Chains	and mkd.and witnessed as described by the surveyor general.The stone is partly decayed therefore I destroy the old cor.and re-establish it in the same place as follows: Set an iron post,3 ft.long,1 in.in dia.,26 ins.in the ground,for $\frac{1}{4}$ sec.cor..mkd.on brass cap $\frac{1}{4}$ S 30 in W half and S.29 in E half;and raise a mound of stone,2 ft.base, $1\frac{1}{2}$ ft.high,W.of cor.
44.25	Bottom of hollow,60 ft.below ridge,course S. 80° W. Asc.
48.50	Top of ridge,50 ft.above hollow,bears N. 60° E.and S. 60° W. Desc.
59.00	Bottom of hollow,50 ft.below ridge,course SW. Asc.
68.40	Top of ridge,90 ft.above hollow,bears N. 60° E.and S. 60° W. Desc.
79.80	Fall 28 lks.East of the cor.of secs.19,20,29, and 30, which is an iron stone,6x10x8 ins.,above ground,firmlly set, and mkd.and witnessed as described by the surveyor general. The old cor.is poorly mkd.and the bearing trees are in good condition;therefore I destroy the old cor.stone and re-establish it in the same place as follows: Set an iron post,3 ft.long,2 ins.in dia.,24 ins.in the ground,for cor.of secs.19,20,29, and 30,mkd.on brass cap T 32 S S 19 in NW. R 7 W S 20 in NE. S 29 in SE.;and S 30 in SW.quadrants;old bearing trees not disturbed The course of this mile is therefore N. $0^{\circ}12'W.$ 79.80 chs. Land,mountainous,in the foot hills broken and rocky. Soil,sandy and clay loam ,medium texture,poor and dry. Timber,cedar and pinon pine. Undergrowth,sage brush and oak. Good grass in Cottonwood canon.

Retracement Sub.T.38 S., R.7 W. -Continued.

Chaining

Mountainous or heavily timbered land. 79.80 chks.

September 30, 1910 At this cor. I set off 2°40'E., on the decl. arc; and at 11 h 50 m a.m., l.m.t., I observe the sun on the meridian, the resulting lat. is 38°08'N., which is the proper lat. nearly.

East, on a retracement line bet. secs. 20 and 29.

Over mountainous land; through heavy cedar and pinon pine timber, and scattering sage brush.

Asc. gradually.

7.60 Swale, 15 ft. above cor., course N. 60° E.

Asc.

31.00 Top of ridge, 150 ft. above swale, bears N. 60° E. and S. 60° W.

Desc.

40.05 Fall 3 lks.S. of the $\frac{1}{2}$ sec. cor. bet. secs. 20 and 29, which is a gray sandstone, 18x18x10 ins., on top of the ground, mkd. and witnessed as described by the surveyor general. I re-establish the cor. in the same place as follows: Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for $\frac{1}{2}$ sec. cor., mkd. on brass cap $\frac{1}{2}$ S 20 in N half and S 29 in S half; from which

A pinon pine, 10 ins. dia., bears N. 43° E., 76 lks.
dist., mkd. $\frac{1}{2}$ S 20 B T.

A pinon pine, 14 ins. dia., bears S. 13° E., 45 lks.
dist., mkd. $\frac{1}{2}$ S 29 B T.

42.00 Bottom of hollow, 100 ft. below ridge, course SW.

Asc.

52.00 Top of ridge, 90 ft. above hollow, bears N. 25° E. and S. 25° W.

Desc.

57.50 Bottom of hollow, 80 ft. below ridge, course SW.

Asc.

Retracement Sub.T.32 S., R.7 W.-Continued.

Chains	
65/50	Top of ridge, 100 ft. above hollow, bears NE and SW.
	Desc.
69.00	Bottom of hollow, 40 ft. below ridge, course S.25°W.
	Asc.
79.90	Fall 7 lks. South of the cor. of secs. 20, 21, 28, and 29, described in the subdivision of this township. The course of this mile is therefore N.89°57' E. 79.90 chs. W.30.00 chs. over rolling foot hill sloping and draining westerly. soil, sandy clay, about 2 ft. deep, gravelly and rock subsoil. Timber, cedar and pinon pine. Undergrowth, oak and s age brush. A very little grass in patches. E.50.00 chs. mountainous land sloping southwesterly. soil, clay mixed with coarse gravel from 6 ins. to 1 ft. deep. volcanic rock subsoil. Timber, cedar and pinon pine. Good grass in patches. Mountainous land, or heavily timbered land, 79.90 chs.

September 30, 1910.

October 1, 1910: At 1 h 50 m p.m., l.m.t., I set off 38°00' N.
on the lat.arc; 3°05'S., on the decl.arc; and determine a
meridian with the solar, at the cor.of secs. 29, 30, 31, and
32.

Thence I run
S.89°51'W., on a retracement line bet.secs. 30 and 31.
Over mountainous land; through heavy cedar and pinon pine
timber.

Desc. gradually along north slope of ridge.

18.00 Leave timber, and enter dense undergrowth, bears N. and S.
Foot of descent, bears N. and S.

Thence in Parowan valley.

36.00 Wash, 40 lks. wide 4 ft. deep, course N.50°W.
40.17 Fall 7 lks. N. of the $\frac{1}{4}$ sec.cor. bet.secs. 30 and 31, which is
a gray sandstone, 6x14x8 ins. above ground, firmly set, and

Retracement Subdivision T.32 S., R.7 W.-Continued.

Chains

mkd. and witnessed as described by the surveyor general.

65.00 Wash, 20 lks.wide, 6 ft.deep, course NW.

77.00 Wash, 20 lks.wide, 3 ft.deep, course N. 80°W.

80.48 Fall 14 lks.N. of the cor.of secs.25,30,31, and 36, described in notes of Retracement W.bdy.T.32 S.,R.7 W.

The course of this mile is therefore S.89°45'W., 80.48 chs.

W.18.00 chs.in foot hills sloping west.Timber, cedar and pinon pine.Undergrowth, scattering sage brush.Good grass.

W.62.48 chs.in Parowan valley gentle slope to the west, and covered with large and small boulders.Soil rich clay loam about 3 ft.deep,mixed with rock so that it would be difficult to plough or cultivate it.No timber.Undergrowth sage brush.

Mountainous or heavily timbered land, or land covered with dense undergrowth, 80.48 chs.

From the cor.of secs.19,24,25, and 30, on W.bdy.of Tp., heretofore described.

I run

East, on a retracement line bet.secs.19 and 30.

Over nearly level valley;through dense sage brush.

Asc.gently over boulders and rocks.

40.25 Intersect the $\frac{1}{2}$ sec.cor.bet.secs.19 and 30, which is a white sandstone, 10x10x6 ins., above ground, firmly set, and mkd. and witnessed as described by the surveyor general.

61.50 Wash, 30 lks.wide, 3 ft.deep, course N.75°W.

Leave valley, bears N.75°W. and S.75°E.

Asc.

67.10 Top of spur, 25 ft.above valley, bears N. and S.

Desc.

70.00 Enter heavy cedar and pinon pine timber, bears NE and SW.

Leave dense and enter scattering sage brush, bears NE and SW.

Retracement Sub., T.32 S., R.7 W.-Continued.

Chains

72.00 Swale, 30 ft. below spur, course S.70°W.

Asc. abruptly.

80.50 Top of spur, 90 ft. above swale, bears NE and SW.

Desc.

80.75 Intersect the cor. of secs. 19, 20, 29, and 30, heretofore described.

Therefore the course of this line is East 80.73 chs.

W.61.00 chs. nearly level Parowan valley covered with rocks and boulders. Soil, rich clay loam mixed with rock and gravel, too gravelly for cultivation. No timber.

Undergrowth, sage brush. Good grass. E.19.73 chs. over rolling hills covered with rocks and sloping westerly.

Soil, hard clay and sandy about 2 ft deep, covered with cedar and pinon pine timber. Scattering sage brush.

Mountainous or heavily timbered land, or land covered with dense undergrowth, 80.73 chs.

October 1, 1910.

John R. Stewart

Instrumentman G.L.O.

October 3, 1910: At 7 h 49 m a.m., l.m.t., I set off 38°01'N. on the lat.arc; 3°45'S., on the decl.arc; and determine a meridian with the solarpat the cor. of secs. 20, 21, 28, and 29.

Thence I run

North, on a retracement line bet. secs. 20 and 21.

Over mountainous land; through heavy cedar and pinon pine timber.

Asc. abruptly over low ledges and boulders.

22.00 Top of ridge, 400 ft. above cor., bears E. and W.

Desc. abruptly over low ledges.

39.87 Fall 3 lks. west of the $\frac{1}{2}$ sec.cor. bet. secs. 20 and 21, which is a limestone, 6x10x5 ins., above ground, firmy set, and mkd.

Retracement Sub.T.32 S., R.7 W.-Continued.

skating

and witnessed as described by the surveyor general. the stone is poorly mkd. therefore I destroy the old cor. and re-establish it in the same place as follows:

Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for 1 sec.cor.. mkd. on brass cap $\frac{1}{2}$ S 20 in W half and S 21 in E half; and raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$ ft. high, " of cor.

51.80 Bottom of canon, 150 ft. below ridge, course N.80°W. Asc.

56.00 Point, 110 ft. above canon, bears N.80°W. and S.80°E. Demo.

60.50 Bottom of hollow, 70 ft. below ridge, course W. Asc.

79.72 Fall 7 lks. West of the cor. of secs. 16, 17, 20, and 21, which is a gray sandstone, 12x22x10 ins. above ground, firmly set, and mkd. and witnessed as described by the surveyor general. The stone is poorly mkd. but the bearing trees are in good shape; therefore I destroy the old cor. stone and re-establish it in the same place as follows:

Set an iron post, 3 ft. long, 2 in. dia., 24 ins. in the ground, for cor. of secs. 16, 17, 20, and 21, mkd. on brass cap

R 32 S 3 17 in NW.

R 7 W S 16 in NE.

S 21 in SE.; and

S 20 in SW. quadrants; bearing trees as originally given.

The course of this mile is therefore N.0°3'E. 79.72 chs. Land, mountainous, very rough and covered with rocks and boulders.

Soil, clay, mixed with rock, about 1 ft. deep, subsoil, gravel. Timber, cedar and pinon pine.

Undergrowth, oak and mahogany.

Good grass for grazing.

Mountainous or heavily timbered land, 79.72 chs.

Retracement Sub.T.32 S., R.7 W.-Continued.

Chains

October 4, 1910: At 7 h 49 m a.m., l.m.t., I set off $38^{\circ}02'N.$ on the lat.arc; $4^{\circ}08'S.$, on the decl.arc; and determine a meridian with the solar, at the cor.of secs.16,17,20 and 21. Thence I run

North, on a retracement line bet.secs.16 and 17.

Over mountainous land; through heavy cedar and pinon pine timber and scattering undergrowth.

Asc.

.20 Top of ridge, bears N. $80^{\circ}W.$ and S. $80^{\circ}E.$

Desc.

13.25 Bottom of hollow, 100 ft. below ridge, course N. $80^{\circ}W.$

Asc.

28.50 Top of ridge, 150 ft. above hollow, bears N. $85^{\circ}W.$ and S. $85^{\circ}E.$

Desc.

36.90 Bottom of swale, 90 ft. below ridge, course N. $75^{\circ}W.$

Asc.

39.92 Fall 17 lks.west of the $\frac{1}{4}$ sec.cor.bet.secs.16 and 17.

which is a cedar, 8 ins.in dia., mkd.and witnessed as described by the surveyor general .✓

43.40 Top of spur, 30 ft. above hollow, bears N $175^{\circ}W.$ and S. $75^{\circ}E.$

Desc.

47.20 Bottom of swale, 65 ft. below ridge, course W.

Asc.

50.00 Top of spur, 40 ft. above swale, bears E. and W.

Desc.

62.25 Bottom of hollow, 100 ft. below spur, course N. $80^{\circ}W.$ Asc.

78.60 Ridge, 100 ft. above hollow, bears N. $80^{\circ}W.$ and S. $80^{\circ}E.$ Desc.

79.86 Fall 35 lks.west of the cor.of secs.8,9,16, and 17., which is a conglomerate stone, 10x12x8 ins., above ground, firmly set , and mkd.and witnessed as described by the surveyor general .✓

The course of this line is therefore N. $0^{\circ}15'E.$ 79.86 chs.

Land, mountainous, very rough and covered with rocks.

Soil, sandy loam about 14 ins.deep, gravelly subsoil.

Retracement Sub.T.32 S., R.7 W.-Continued.

Chains	Timber, ced ar and pinon pine.
	Undergrowth, sage brush.
	Good grass for grazing.
	Mountainous or heavily timbered land, 79.86 chs.
	October 4, 1910: At the noon hour the sky is overcast and solar observations are impossible.
<hr/>	
	North, on a retracement line betsecs.8 and 9.
	Over mountainous land; through heavy cedar and pinon pine timber and scattering undergrowth.
	Desc.
9.50	Bottom of hollow, 50 ft. below cor., course W.
	Asc.
16.60	Top of spur, 60 ft. above hollow, bears E. and W.
	Desc.
26.00	Bottom of swale, 60 ft. below ridge, course N.85°W.
	Asc.
33.00	Top of spur, 40 ft. above swale, bears E. and W.
	Desc.
35.25	Bottom of hollow, 20 ft. below spur course W.
	Asc.
40.05	Fall 3 lks. west of the $\frac{1}{4}$ sec.cor. betsecs.8 and 9, which is a sandstone, 8x10x5 ins., above ground, firmly set, and mkd. and witnessed as described by the surveyor general.
40.20	Top of spur, 30 ft. above hollow, bears E. and W.
	Desc.
41.00	Bottom of swale, 25 ft. below spur, course W.
	Asc.
41.75	Top of spur, 30 ft. above swale, bears E. and W.
	Desc.
49.50	Bottom of gulch, 40 ft. below spur, course W.
	Asc.
50.90	Top of spur, 30 ft. above gulch, bears E. and W.

Retracement Sub.T. 32 S., R. 7 W. -Continued.

Chains	
	Desc.
55.10	Bottom of hollow, 40 ft. below spur, course W.
	Asc.
64.00	Top of spur, 40 ft. above swale, bears E. and W.
	Desc.
71.00	Bottom of swale, 50 ft. below spur, course N.85°W.
	Asc.
78.25	Top of spur, 40 ft. above swale, bears N.85°W. and S.85°E.
	Desc.
80.16	Fall 7 lks. W. of the cor. of secs. 4, 5, 8, and 9., which is a volcanic stone, 9x12x9 ins. above ground, firmly set, and mkd. and witnessed as described by the surveyor general. I destroy the old cor. and re-establish it in the same place as follows: Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground for cor. of secs. 4, 5, 8, and 9, mkd. on brass cap T 32 S S 5 in NW. R 7 W S 4 in NE. S 9 in SE.; and S 8 in SW. quadrants; from which A pinon pine, 11 ins. in dia., bears N.72°30'E., 18 lks. dist.. mkd. T 32 S R 7 W S 4 B T. A pinon pine, 12 ins. dia., bears S.51°E., 60 lks. dist.. mkd. T 32 S R 7 W S 9 B T. A cedar, 5 ins. dia., bears S.55°30'W., 18 lks. dist.. mkd. T 32 S R 7 W S 8 B T. A cedar, 6 ins. dia., bears N.72°30'W., 20 lks. dist.. mkd. T 32 S R 7 W S 5 B T. The course of this mile is therefore N.0°3'E., 80.16 chs. Land, mountainous. Soil, clay loam; 2nd rate. Timber, cedar and pinon pine. Undergrowth, sage brush. Good grass for grazing. Mountainous or heavily timbered land, 80.16 chs.

Retracement Sub.T.32 S., R.7 W.-Continued.

Chains

October 4, 1910.

October 5, 1910: At 7 h 49 m a.m., l.m.t., I set off $38^{\circ}03'N.$ on the lat.arc; $4^{\circ}31'S.$, on the decl.arc; and determine a meridian with the solar, at the cor.of secs.4, 5, 8, and 9. Thence I run

East, on retrace ment line bet.secs.4 and 9.

Over mountainous land; through heavy cedar and pinon pine timber, and scattering sage brush.

Desc.

1.10 Bottom of swale, 10 ft. below cor., course N. $85^{\circ}W.$

Asc.

17.25 Top of ridge, 75 ft. above swale, bears N. $85^{\circ}W.$ and S. $85^{\circ}E.$

Desc.

22.10 Bottom of swale, 40 ft. below ridge, course N. $75^{\circ}W.$

Asc.

35.00 Top of spur, 85 ft. above swale, bears NW and SE.

Desc.

40.00 Fall 11 lks. South of the $\frac{1}{4}$ sec.cor.bet.secs.4 and 9, which

is an iron stone, $6 \times 8 \times 8$ ins., above ground, firmly set, and mkd. and witnessed as described by the surveyor general, the cor.stone is poorly mkd. I therefore destroy the old cor. and re-establish it in the same place as follows.

Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for $\frac{1}{4}$ sec.cor.. mkd. on brass cap $\frac{1}{4}$ S 4 in N half; and S 9 in S half; from which

A pin n pine, 9 ins.dia., bears N. $72^{\circ}E.$, 16 lks.

dist..mkd. $\frac{1}{4}$ S 4 B T.

A pinon pine, 10 ins.dia., bears S. $38^{\circ}E.$, 10 lks.

dist..mkd. $\frac{1}{4}$ S 9 B T. ✓

43.40 Bottom of hollow, 20 ft. below spur, course NW.

Asc.

Retracement Sub.T.32 S., R.7 W.-Continued.

Chains

55.50 Top of spur, 70 ft. above hollow, bears NW and SE.

Desc.

62.00 Bottom of hollow, 60 ft. below spur, course N.30°W.

Asc.

79.52 Fall 21 lks. South of the cor.of secs.3,4,9, and 10, which is an iron stone, 10x10x9 ins. above ground, firmly set, and mkd. and witnessed as described by the surveyor general. The cor. stone is pporly mkd. therefore I destroy the old cor. and re-establish it in the same place as follows:
Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground, for cor.of secs.3,4,9, and 10, mkd.on brass cap

T 32 S S 4 in NW.

R 7 W S 3 in NE.

S 10 in SE.; and

S 9 in SW.quadrants; from which

A pinon pine, 12 ins.dia., bears S.17°W., 47 lks. dist..mkd.T 32 S R 7 W S 9 B T.

A cedar, 4 ins.dia., bears N.59°W., 11 lks. dist..mkd.T 32 S R 7 W S 4 B T.

Raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, % of cor.

The course of this mile is therefore N.89°51'E.79.52chs.

Land, mountainous broken ridges and hollows, slopes and drains northwesterly.

Soil, sandy loam, from 6 ins.to 14 insdeep. subsoil volcanic rock.

Timber, cedar and pinon pine.

Undergrowth, sage brush.

Some grass .

Mountainous or heavily timbered land, 79.52 chs.

Oct 5, 1910: At this cor. I set off 4°36'S?, on the decl.arc; and at 11 h 49 m a.m., l.m.t., I observe the sun on the meridian; the resulting lat. is 38°03'N., which is the proper lat.nearly.

Retracement Sub.T.32 S., R.7 W.-Continued.

Chains	✓
	N.0°15'W., on a retrace line bet.secs.3' and 4.
	Over mountainous land; through scattering timber and scattering undergrowth.
	Desc.
19.00	Bottom of hollow, 100 ft. below cor., N.65°W.
	Asc.
25.00	Top of spur, 50 ft. above hollow, bears E. and W.
	Desc.
30.00	Bottom of hollow, 50 ft. below spur, course W.
	Asc.
59.50	Top of ridge, 200 ft. above swale, bears NW and SE.
	Desc.
41.65	Fall 2 lks. East of the $\frac{1}{4}$ sec.cor.bet.secs.3 and 4, which is a sandstone, 8x10x8 ins., above ground, firmly set, and mkd. and witnessed as described by the surveyor general. The cor. is poorly mkd. and partly decayed therefore I destroy the old cor. and re-establish it in the same place as follow:
	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for $\frac{1}{4}$ sec.cor..mkd.on brass cap $\frac{1}{4}$ S 4 in W half. and S 3 in E half. ; from which
	A cedar, 4 ins.dia., bears S.56°E., 18 lks. dist..mkd. $\frac{1}{4}$ S 3 B T.
	A pinon pine, 11 ins.dia., bears N.31°W., 33 lks. dist.,mkd. $\frac{1}{4}$ S 4 B T.
54.00	Bottom of hollow, 100 ft. below ridge, course N.70°W.
	Asc.
60.00	Top of ridge, 75 ft. above hollow, bears N.35°W. and S.35°E.
	Desc.
73.80	Bottom of hollow, 50 ft. below ridge, course NW.
	Asc.
83.85	Fall 56 lks. East of the cor.of secs.3,4,33, and 34, here- tofore described .
	The course of the south half of this line is therefore

Retracement Subdivision T.32 S., R.7 W.-Continued.

Chains N.0°17'W., 41.65 chs. and the north half is N.0°59'W., 42.20 chs.

Land, mountainous drains and slopes west.

Soil, clay and sandy loam about 2 ft. deep, mixed with decomposing shales and volcanic rock. Subsoil shales and volcanic rock.

Timber, cedar and pinon pine.

Undergrowth, sage brush.

Mountainous or heavily timbered land, 83.85 chs.

October 5, 1910.

Quinby Stewart,
Instrumentman G.L.O.

Subdivision of T.32 S., R.7 W.

Survey commenced September 29, 1910, and executed with a W. and L.E. Gurley Explorer's transit, No. 957, with solar attachment. The horizontal limb is provided with two double verniers placed opposite to each other; reading to single minutes of arc; which is also the least count of the verniers of the latitude and declination arcs. ✓

The instrument was examined, tested on the meridian, at Salt Lake City, found correct, and was approved by the surveyor general for Utah, on August 6, 1910.

Note: For complete test of instrument see notes of Retracement Sub. T.32 S., R.7 W.

At 7 h 51 m a.m., l.m.t., I set off 58°01'N., on the lat. arc; 2°12'S., on the decl. arc; and determine a meridian with the solar at the cor. of secs. 20, 21, 28, and 29, which is a cedar, 10 ins. in dia., mkd. and witnessed as described by

Subdivision of T.32 S., R.7 W.-Continued.

Chains

the surveyor general. The tree cor. is dying and markings are mostly overgrown; therefore I destroy the old cor. and re-establish it in the same place as follows:

Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground, for cor. of secs. 20, 21, 28, and 29, mkd. on brass cap

T 32 S S 20 in NW.

R 7 W S 21 in NE.

S 28 in SE.; and

S 29 in SW. quadrants; from which

A pinon pine, 5 ins. dia., bears N. 54° E., 39 lks.

dist..mkd.T 32 S R 7 W S 21 B T.

A cedar, 10 ins. dia., bears S. 57° E., 42 lks.

dist..mkd.T 32 S R 7 W S 28 B T.

A cedar, 6 ins. dia., bears S. 43° W., 35 lks.

dist..mkd.T 32 S R 7 W S 29 B T.

A pinon pine, 8 ins. dia., bears N. 60° W., 70 lks.

dist..mkd.T 32 S R 7 W S 20 B T.

Thence I run

South, on a random line bet. secs. 28 and 29.

40.00 Set temp. $\frac{1}{4}$ sec.cor.

80.00 Set temp.cor. of secs. 28, 29, 32, and 33.

Thence I run

West, on a random line bet. secs. 29 and 32.

40.00 Set temp. $\frac{1}{4}$ sec.cor.

79.55 Intersect N. and S. line, 5 lks. S. of the cor. of secs. 29, 30, 31, and 32, heretofore described.

Thence I run

S. 89° 58' E., on a true line bet. secs. 29 and 32.

Over mountainous land; through scattering timber and scatter undergrowth.

Desc.

30.00 Wood road, bears NW and SE.

57.50 Cottonwood creek, 3 lks. wide, 3 ins. deep, in bottom of Cottonwood canon, 200 ft. below cor., course N. 80° W.

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Subdivision of T. 32 S., R. 7 W. - Continued.

- Chains. Asc.gradually along south slope;
 39.77 $\frac{1}{2}$ Set an iron post 3 ft.long, 1 in.in dia., 26 ins.in the ground, for $\frac{1}{4}$ sec.cor., mkd.on brass cap $\frac{1}{4}$ S 29 in N. half, and S 32 in S.half; from which
 An oak, 4 ins.dia., bears N.32° 30'W. 6 lks.dist.
 mkd. $\frac{1}{4}$ S 29 B T
 An oak, 5 ins.dia., bears S.50° W. 6 lks.dist.,
 mkd. $\frac{1}{4}$ S 32 B T
 79.55 Intersect temp.cor.
 Set an iron post 3 ft.long, 2 ins.in dia., 24 ins.in the ground, for cor.of secs.38,39,32, and 33, mkd.on brass cap
 T 32 S S 29 in NW.
 R 7 W S 28 in NE.
 S 33 in SE.; and
 S 32 in SW.quadrants; from which
 A pinon pine, 8 ins.dia., bears N.32° E. 30 lks. dist., mkd.T 32 S R 7 W S 28 B T
 A cedar 5 ins.dia.bears S.48°E. 26 lks.dist.
 mkd.T 32 S R 7 W S 33 B T
 A cedar 7 ins.dia., bears S.36°W. 20 lks.dist .
 mkd.T 32 S R 7 W S 32 B T
 A pinon pine, 6 ins.dia., bears N.59°W. 20 lks. dist., mkd.T 32 S R 7 W S 29 B T
 Land, mountainous, slopes gradual and draining into Cottonwood Canon.
 Soil, rich clay loam about 2 ft.deep, subsoil clay and gravel.
 Timber, cedar and pinon and a few cottonwood trees along Cottonwood Canon.
 Undergrowth, oak and sagebrush.
 Good grass for grazing.
 Mountainous land 79.55 chs.
 September 29, 1910: At this cor.I set off 2° 16'S.on the decl.arc; and at 11h 51m a.m.l.m.t., I observe

Subdivision of T. 32 S., R. 7 W. - Continued.

Chains.

the sun on the meridian; the resulting lat. is $38^{\circ} 00'$ N., which is the proper lat. nearly.

Sept. 29, 1910.

John P. Stewart
Instrumentman G.L.O.

North on a true line bet. secs. 28 and 29
Descending over mountainous land; through heavy timber
and scattering undergrowth.

- 20.00 Bottom of hollow, 25 ft. below spur, course SW. Asc.
- 24.50 Top of spur, 25 ft. above hollow, bears NE. and SW.
Desc.
- 36.00 Bottom of hollow, 75 ft. below ridge, course S.60° W.
Ascend.
- 35.50 Top of ridge, 100 ft. above hollow, bears NE. and SW.
Descend.
- 40.00 Set an iron post 3 ft. long, 1 in. in dia., 16 ins. in the
ground, on solid rock, and surrounded by mound of
earth and stone, for $\frac{1}{4}$ sec. cor., mkd. on brass cap $\frac{1}{4}$
S 29 in W. half, and S 28 in E. half; from which
A pinon pine, 7 ins. dia., bears N.67°E. 33 lks.
dist., mkd. $\frac{1}{4}$ S 28 B T
- A pinon pine, 14 ins. dia., bears N.27°W. 22 lks.
dist., mkd. $\frac{1}{4}$ S 29 B T
- 51.50 Bottom of hollow, 75 ft. below ridge, course S.60°W.
Ascend.
- 57.60 Top of rocky ridge, 400 ft. above cor. bears NE. and SW.
Descend.
- 80.00 The cor. of secs. 20, 21, 28, and 29.
Land, mountainous, broken and steep, sloping and drain-
ing southwesterly.
Soil, clay and sandy loam, hard and dry and poor; sub-
soil, clay and rocky.
Timber, cedar and pinon pine.

Subdivision of T.32 S., R.7 W.-Continued.

Chains	Undergrowth, sage brush.
	A very little grass.
	Mountainous or heavily timbered land, 80.00 chs.
	October 3, 1910.
	Darby Stewart
	Instrumentman G.L.O.
	Subdivision T.32 S., R.7 W.
	Survey commenced October 10, 1910, and executed with a Young and Sons light mountain transit, No. 7392, with solar attachment. The horizontal limb is provided with two double verniers placed opposite to each other, reading to single minutes of arc; which is also the least count of the verniers on the latitude and declination arcs.
	The instrument was examined, tested on the meridian at Salt Lake City, found correct, and was approved by the surveyor general for Utah, on Aug. 6, 1910. ✓
	I examine the adjustment of the instrument and correct the level and collimation errors; then, to test the solar apparatus by comparing its indications resulting from solar observations made during p.m. and a.m. hours, with a meridian established by Polaris observation; I proceed as follows:
	At the cor. of secs. 3, 4, 9, and 10, heretofore described. latitude $38^{\circ}03'24''$ N., longitude $112^{\circ}36'50''$ W., I set off $38^{\circ}03'24''$ N., on the lat. arc; $6^{\circ}32'S.$, on the decl. arc; and at 4 h 47 m p.m., l.m.t., I determine a meridian with the solar, and mark a point thereof on a stone, firmly set, in the ground, 5.00 chs. N. of the cor.
	At 6 h 18 m p.m., l.m.t., I observe Polaris at eastern elongation, in accordance with the Manual, and mark a point thereof on a wooden plug set in the ground 5.00 chs. N. of the cor.

Subdivision of T.32S., R.7 W.-Continued.

Chains

October 10, 1910.

October 11, 1910: At 7 h 30 m a.m., l.m.t., I lay off the azimuth of Polaris $1^{\circ}29.4'$ to the west, and mark a point in the meridian thus determined by cutting a small groove in the stone already set 5.00 chs. N. of the cor.; this mark falls 0.33 ins. east of the meridian determined by the solar.

At 7 h 47 m a.m., l.m.t., I set off $38^{\circ}03'N.$, on the lat.arc; $6^{\circ}49'N.$, on the decl.arc; na and mark the meridian determined with the solar, by a cross on the stone already set 5.00 chs. N. of the cor.; this mark falls 0.37 ins. east of the meridian established by Polaris observation.

The solar apparatus by p.m. and a.m. observations defines positions for meridians respectively about $0^{\circ}17'$ west and $0^{\circ}19'$ east of the meridian determined by Polaris observation; therefore I conclude that the adjustments of the instrument are satisfactory.

The magnetic bearing of the meridian at 8 h 30 m a.m., is $N.15^{\circ}58'W.$, the angle thus determined gives the mag.decl. $15.58'E.$

From the cor. of secs. 3, 4, 9, and 10, heretofore described.

I run

South, on a random line bet.secs. 9 and 10.

40.00 Set temp. $\frac{1}{2}$ sec.cor.

8.00 Set temp.cor. of secs. 9, 10, 15, and 16.

Thence I run

... West ..., on a random line bet.secs. 9 and 16.

40.00 Set temp. $\frac{1}{2}$ sec.cor.

Subdivision of T.32 S., R.7 W.-Continued.

Chains

79.66 Intersect N. and S. line, 35 lks. N. of the cor. of secs.
8, 9, 16, and 17, heretofore described.

Thence I run

N. $89^{\circ}45'$ E., on a true line bet. secs. 9 and 16.

Over mountainous land; through heavy timber and scattering sage brush.

Asc.

32.00 Top of ridge, 300 ft. above cor., bears N. 20° E. and S. 20° W.

Desc.

39.83 Set an iron post, 3 ft. long, 1 in. in dia., 20 ins. in the ground, on solid rock, and surrounded by mound of stone, for $\frac{1}{4}$ sec. cor.. mkd. on brass cap $\frac{1}{4}$ S 9 in N half and S 16 in S half; from which

A cedar, 6 in. dia., bears N. 50° W., 45 lks.dist.. mkd. $\frac{1}{4}$ S 9 B T.A pinon pine, 10 ins. dia., bears S. 15° W., 22 lks.dist.. mkd. $\frac{1}{4}$ S 16 B T.

48.50 Bottom of hollow, 100 ft. below ridge, course N.

Asc.

60.00 Top of spur, 50 ft. above hollow, bears N. and S.

Desc.

71.20 Bottom of canon, 200 ft. below spur, course N. 30° W.

Asc.

79.66 The temp. cor. of secs. 9, 10, 15, and 16.

Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground, for cor. of secs. 9, 10, 15, and 16, mkd. on brass cap

T 32 S S 9 in NW.

R 7 W S 10 in NE..

S 15 in SE.; and

S 16 in SW. quadrants; from which

A pinon pine, 6 ins. dia., bears N. 40° E., 40 lks.

dist.. mkd. T 32 S R 7 W S 10 B T.

A cedar, 12 ins. dia., bears S. 57° E., 57 lks.

dist.. mkd. T 32 S R 7 W S 15 B T.

Subdivision of T.32 S., R.7 W.-Continued.

Chains

A pinon pine, 10 ins. dia., bears S. 55° W., 42 lks.

dist..mkd.T 32 S R 7 W S 16 B T.

A cedar, 11 ins. dia., bears N. 71° W., 26 lks.

dist..mkd.T 32 S R 7 W S 9 B T.

W.32.00 chs.on west slope of mountain steep and rocky;

Soil, clay loam about 12 ins. deep, subsoil, clay. Timber, cedar and pinon pine. Undergrowth, sage brush. E. 47.35 chs. over broken ridges and hollows, with steep rocky slopes draining northerly. Soil, clay mixed with gravel and rock; subsoil, rock. Timber, cedar and pinon pine. Undergrowth, sage and oak brush. Good grass for grazing on entire mile.

Mountainous or heavily timbered land, 79.66 chs.

October 11, 1910: At this cor. I set off 6°54' S., on the decl. arc; and at 11 h 47 m a.m., l.m.t., I observe the sun on the meridian, the resulting lat. is 38°05' N., which is the proper lat. nearly.

North, on a true line bet. secs. 9 and 10.

Over mountainous land; through heavy pinon pine and cedar timber.

Asc.

16.00 Top of ridge, 300 ft. above cor., bears E. and W.

Desc.

30.00 Bottom of hollow, 300 ft. below ridge, course NW.

Asc.

39.00 Top of ridge, 50 ft. above hollow, bears E. and W.

Desc.

40.00 Set an iron post, 3 ft. long, 1 in. in dia., 26 lbs. in the ground, for $\frac{1}{4}$ sec.cor..mkd.on brass cap $\frac{1}{4}$ S 10 in E half and S 9 in W half; from which

A pinon pine, 7 ins. dia., bears S. 50° E., 37 lks.

dist..mkd. $\frac{1}{4}$ S 10 B T.

Subdivision of T. 32 S., R. 7 W. Continued.

Chains	A cedar, 6 ins. dia., bears N.27°W., 22 lks. dist.. mkd. $\frac{1}{4}$ S 9 B T.
42.50	Bottom of hollow, 100 ft. below ridge, course N.70°W. Asc.
51.00	Top of ridge, 150 ft. above hollow, bears N.80°W. and S.80°E Desc.
63.00	Bottom of hollow, 200 ft. below ridge, course W. Asc.
69.00	Top of ridge, 200 ft. above hollow, bears E. and W. Desc.
80.00	The cor. of secs. 3, 4, 9, and 10. ✓ Entire mile over a series of broken ridges and hollows, sloping and draining westerly, and covered with loose volcanic rock. Soil, clay loam mixed with volcanic rock about 1 ft. deep, subsoil, rock and hard clay. Timber, cedar and pinon pine. Undergrowth, sage and oak brush. Good grass for grazing. Mountainous or heavily timbered land, 80.00 chs.

October 11, 1910.

Dunby Stewart

Instrumentman G.L.O.

September 28, 1910: At 7 h 51 m a.m., l.m.t., I set off 38° 00'N., on the lat.arc; 1°49'S., on the decl.arc; and determine a meridian with the solar, at the cor.of secs. 25, 30, 31, and 36, on E.bdy.of Tp., heretofore described.

Note: On account of the the S.bdy.of Tp., being out of limits in alinement and measurement,
I run
West, on a sectional correction line bet.secs. 25 and 35.
Over mountainous land; through dense sage brush and scrub

Subdivision of T.32 S., R.7 W.-Continued.

Chains	oak brush.
	Desc.
5.20	Granite boulder 6x5 ft., bears North 5 lks. dist.
23.50	Creek, 1 lk. wide, $\frac{1}{2}$ in. deep, in bottom of hollow, 50 ft. below sec. cor., course N.5°W.
	Asc.
34.00	Top of rocky ridge, 150 ft. above hollow, bears N. and S.
	Desc.
40.00	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor.. mkd. on brass cap $\frac{1}{2}$ S 25 in N half and S 36 in S half; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, N. of cor. ✓
41.00	Head of hollow, 50 ft. below ridge, course NW.
	Asc.
48.00	Top of ridge, 50 ft. above hollow, bears NW and SE.
	Desc.
59.40	Bottom of hollow, 100 ft. below ridge, course N.40°W.
	Asc.
66.40	Top of ridge, 75 ft. above hollow, bears N.30°W. and S.30°E
	Desc.
75.30	Bottom of hollow, 100 ft. below ridge, course N.30°W.
	Asc.
80.00	Set an iron post, 3 ft. long, 2 ins. in the, 24 ins. in the ground, for cor. of secs. 25, 26, 35, and 36. mkd. on brass cap T 32 S S 26 in NW. R & W S 25 in NE. S 36 in SE.; and S 35 in SW. quadrants; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. ✓
	Entire mile through dense sage and scrub oak brush cover series of ridges and hollows, draining northwest. Soil of rich sandy loam from 2 ft 6 ft. deep, subsoil, clay. Tops of ridges covered with volcanic rock and soil mixed with coarse gravel and rocks.
	Mountainous land, or land covered with dense undergrowth,

Subdivision of T.32 S., R.7 W.-Continued.

Chains	
	80.00 chs.
	West, on a sectional correction line bet. secs. 26 and 35.
	Over rolling mountainous land; through dense sage and scrub oak brush.
	Asc.
8.00	Top of ridge, 100 ft. above cor., bears N.20°W. and S.20°E.
	Desc. gradually.
40.00	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor. mkd. on brass cap $\frac{1}{4}$ S 26 in N half and S 35 in S half; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, N. of cor. ✓
41.00	Bottom of hollow, 100 ft. below ridge, course N.15°W.
	Asc.
60.00	Top of ridge, 100 ft. above hollow, bears N. and S.
	Desc.
80.00	Set an iron post, 3 ft. long, 2 ins. in dia., 12 ins. in the ground, on hard pan, and surrounded by mound of earth and stone, for cor. of secs. 26, 27, 34, and 35, mkd. on brass cap T 32 S S 27 in NW.
	R 7 W S 26 in NE.
	S 35 in NE.
	S 34 in SW. quadrants; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. ✓
	Land, rolling mountainous sloping and draining northerly into Buckskin valley.
	Soil, rich loam about 2 ft. deep, mixed with rock and gravel.
	No timber.
	Undergrowth, sage and scrub oak.
	Good grass for grazing.
	Mountainous land, or land covered with dense undergrowth,
	80.00 chs.

Subdivision of T.32 S., R.7 W.-Continued.

- Chains September 28, 1910: At this cor. I set off $1^{\circ}53' S.$, on the decl. arc; and at 11 h 51 m a.m., l.m.t., I observe the sun on the meridian, the resulting lat. is $38^{\circ}00' N.$, which is the proper lat. nearly.
- West, on a sectional correctional line bet. secs. 27 and 34. Over rolling mountainous land; through dense oak and sage brush. Asc.
- 22.00 Asc., sec. 27 above cor., bears NE and SW.
- 22.50 Old road, bears NE and SW.
- 27.50 Bottom of hollow, 250 ft. below sec. cor., course SE. 10 chs. thence SW.
- Asc.
- Leave oak brush, bears NE and SW.
- Enter scattering cedar and pinon pine timber, bears NE and SW.
- 40.00 Set an iron post, 3 ft. long, 1 in. in dia., 14 ins. in the ground, on solid rock, and surrounded by mound of earth and stone, for $\frac{1}{4}$ sec. cor. mkd. on brass cap $\frac{1}{2}$ S 27 in N half and S 34 in S half; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, N. of cor.
- 54.00 Top of ridge, 200 ft. above hollow, bears NE and SW.
- Desc. abruptly.
- 70.00 Enter heavy cedar and pinon pine timber, bears N. and S. Leave dense sage and enter scattering sage, bears N. and S.
- 80.00 Set an iron post, 3 ft. long, 2 ins. in dia., 20 ins. in the ground, on solid rock, and surrounded by mound of stone, for cor. of secs. 27, 28, 33, and 34, mkd. on brass cap T 32 S S 28 in NW.
R 7 W S 27 in NE.
S 34 in NE.; and
S 33 in SW. quadrants; from which A cedar, 11 ins. dia., bears N. 56° E., 25 lks.

Subdivision of T. 32 S. R. 7 W.-Continued.

Chains	<p>dist.mkd.T 32 S R 7 W S 27 B T.</p> <p>A cedar, 5 ins.dia., bears S.58°E., 20 lks.</p> <p>dist..mkd.T 32 S R 7 W S 34 B T.</p> <p>A cedar, 12 ins.dia., bears S.59°W., 143 lks.</p> <p>dist..mkd.T 32 SR 7 W S 33 B T.</p> <p>A cedar, 7 ins.dia., bears N.39°W., 67 lks.</p> <p>dist..mkd.T 32 S R 7 W S 28 B T.✓</p> <p>E.54.00 chs.over rolling mountainous land, sloping southw and covered with small volcanic rock .Soil,rich loam with rocks and gravel about 14 ins.deep, on rock.No timber except a few cedar and pinon pine trees.Undergrowth,oak and sage brush.Good grass .W.26.00 chs.on steep west slope of ridge,covered with rocks and boulders.Soil,clay loam about 6 ins.deep,subsoil,clay.Timber,cedar and pinon pine.Undergrowth,sage brush.A very little grass.</p> <p>Mountainous or heavily timbered land,or land covered with dense undergrowth,80.00 chs.</p>
	September 28, 1910.
	<p>September 29, 1910:At 2 h 51 m p.m.,l.m.t.,I set off 38° 00'N.,on the lat.arc;2°21'S.,on the decl.arc;and determine a meridian with the solar.at the cor.of secs. 27,28,33, and 34.</p> <p>Thence I run</p> <p>West, on a sectional correction line bet.secs.28 and 33.</p> <p>Note:I know from connections made that this line will not close within limits.</p> <p>Over mountainous land;through heavy cedar and pinon pine timber and scattering sage brush.</p> <p>Desc.</p> <p>15.75 Bottom of hollow,100 ft.below cor.,course S.25°W.</p> <p>Asc.</p>

Subdivision of T.32 S., R.7 W.-Continued.

Chains

23.00 Top of spur, 50 ft. above hollow, bears NE and SW.

Desc.

29.50 Bottom of hollow, 25 ft. below spur, course SW.

Asc.

34.00 Top of spur, 25 ft. above hollow, bears NE and SW.

Desc.

40.00 Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor.. mkd. on brass cap $\frac{1}{4}$ S 28 in N half and S 33 in S half from whichA cedar, 4 ins. dia., bears N. 60° E., 52 lks.dist.. mkd. $\frac{1}{4}$ S 28 B.T.A cedar, 10 ins. dia., bears S. 20° E., 24 lks.dist.. mkd. $\frac{1}{4}$ S 33 B.T. ✓50.25 Bottom of hollow, 25 ft. below spur, course S. 20° W.

Asc.

55.00 Top of spur, 25 ft. above hollow, bears NE and SW.

Desc.

78.50 Road, bears N. 60° W. and S. 60° E.

Leave heavy cedar and pinon pine timber and enter scattering timber, bears NW and SE.

Enter dense sage brush, bears NW and SE.

80.30 Intersect N. and S. line, 4.89 chs. S. $0^{\circ}5'$ W. of the cor. of secs 28, 29, 32, and 33, heretofore described.,

Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground, for closing cor. of secs. 28 and 33, mkd. on brass cap

T 32 S R 7 W in N half.

C C S 28 S 32 in W half.

S 28 in NE.; and

S 33 in SE. quadrants; from which

A cedar, 6 ins. dia., bears N. 51° E., 201 lks.

dist.. mkd. T 32 S R 7 W S 28 B.T.

A cedar, 6 ins. dia., bears S. $83^{\circ}45'$ E., 202 lks.

dist.. mkd. T 32 S R 7 W S 33 B.T. ✓

Note: I destroy all marks on the cor. of secs. 28, 29, 32, and

Subdivision of T.32 S., R.7 W.-Continued.

Chains	53, which pertain to secs. 28 and 33.
	Land, broken ridges and hollows, sloping and draining southward into Cottonwood canon.
	Soil, clay loam about 14 ins. deep, mixed with rock.
	Timber, cedar and pinon pine.
	Undergrowth, sage brush.
	Good grass for grazing.
	Mountainous or heavily timbered land, or land covered with dense undergrowth, 80.30 chs.
	September 29, 1910.
	October 3, 1910: At 7 h 49 m a.m., l.m.t., I set off 38°00' N., on the lat. arc; 3°45' S., on the decl. arc; and determine a meridian with the solar, at the cor. of secs. 25, 26, 35, and 36.
	Thence I run
	S.0°1'E., on a true line bet. secs. 35 and 36.
	Over mountainous land; through dense sage and oak brush.
	Asc.
40.00	Set an iron post, 3 ft. long, 1 in. in dia., 26 lbs. in the ground, for $\frac{1}{2}$ sec. cor.. mkd. on brass cap $\frac{1}{4}$ S 35 in W half and S 36 in E half; dig pits, 18x18x12 ins., N. and S. of post, 3 ft. dist.; and raise a mound of earth, $3\frac{1}{2}$ ft. base, 1 $\frac{1}{2}$ ft. high, W. of cor.
42.00	Leave sage brush and enter dense oak and buck brush, bears E. and W.
60.00	Top of rocky ridge, 250 ft. above cor., bears N. 45° W. and S. 45° E.
	Desc.
76.33	Intersect S. bdy. of Tp., 74 lbs. S. 88°22' W., of the cor. of secs. 1, 2, 35, and 36, heretofore described.
	Set an iron post, 3 ft. long, 2 ins. in dia., 24 lbs. in the

Subdivision of T.32 S., R.7 W.-Continued.

Chains	ground, for closing cor. of secs. 35 and 36, mkd. on brass cap C C T 33 S R 7 W S 1 S 2 in S half. T 32 S S 35 in NW.; and R 7 W S 36 in NE.; quadrants; from which A mahogany, 6 ins. dia., bears N.8°E., 75 lks. dist..mkd.T 32 S R 7 W S 36 aB T. A pinon pine, 6 ins. dia., bears N.20°W., 86 lks. dist..mkd.T 32 S R 7 W S 35 B T.
	Note; I destroy all marks on the cor. of secs. 1, 2, 35, and 36, which pertain to secs. 35 and 36. ✓
	N.60.00 chs. over north slope of high ridge, covered with dense growth of sage brush and scattering oak and buck brush. No timber. Soil, rich loam, about 3 ft deep, subsoil gravel. Good grass for grazing. S.16.33 chs. over steep south slope of ridge, draining southward into Cottonwood canon. No timber except a few scattering cedar and pinon pine trees. Dense undergrowth, oak, buck brush, and sage.
	Soil, clay loam, hard and dry and rocky; Mountainous land, or land covered with dense undergrowth, 76.33 chs.
	N.0-°3'W., bet. secs. 25 and 26.
	Over mountainous land; through dense sage and oak brush.
	Desc.
8.75	Bottom of hollow, 50 ft. below cor., course N.30°W.
	Asc.
35.00	Top of ridge, 40 ft. above hollow, bears N.20°W. and S.20° E.
	Desc.
40.00	Set an iron post, 3 ft. long, 1 in. in dia., 20 ins. in the ground, on gravel cemented, and surrounded by mound of earth and stone, for 1 sec.cor..mkd.on brass cap $\frac{1}{4}$ S 25 in W. half; and S 25 in E half; and raise a mound of stone, 2 ft.

Subdivision of T.32 S., R.7 W.-Continued.

Chains	base, $1\frac{1}{2}$ ft. high, W.of cor.
59.00	Bottom of hollow, 50 ft. below ridge, course N.20°E.
Asc.	
80.00	Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground, for cor. of secs. 23, 24, 25, and 26, mkd.on brass cap T 32 S S 23 in NW. R 7 W S 24 in NE. S 25 in SE.; and S 26 in SW. quadrants; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W.of cor.
	Land, rolling mountains, sloping and draining northerly in- to Buckskin valley.
	Soil, rich loam about 2 ft. deep, mixed with rock and gravel covered with volcanic rock. \checkmark
	No timber .
	Undergrowth, sage and oak brush.
	Good grass for grazing.
	Mountainous land, or land covered with dense undergrowth, 80.00 chs.
	October 3, 1910: At the noon hour the sky is overcast and solar observations are impossible. \checkmark
	East, on a random line betsecs. 24 and 25.
40.00	Set temp. $\frac{1}{4}$ sec.cor.
79.85	Intersect E.bdy.of Tp., 12 lks.S.of the cor.of secs. 19, 24, 25, and 30, heretofore described.
	Thence I run S.89°55'W., on a true line betsecs. 24 and 25.
	Over rolling mountainous land; through dense sage and scat- tering oak brush.
	Asc.
5.50	Top of ridge, 20 ft. above cor., bears N.25°W.and S.25°E.

Subdivision of T. 32 S., R. 7 W.-Continued.

Chains	Desc.
13.50	Bottom of hollow, 30 ft. below ridge, course N. 20°W. Asc.
20.00	Top of ridge, 40 ft. above hollow, bears N. and S. Desc.
34.00	Bottom of hollow, 50 ft. below ridge, course N. Asc.
39.93	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor.. mkd. on brass cap $\frac{1}{4}$ S 24 in N half. and S 25 in S half; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, N. of cor.
49.00	Top of ridge, 50 ft. above hollow, bears N. 20°E. and S. 20°W. Desc.
65.00	Bottom of hollow, 25 ft. below ridge, course N. 5°E. Asc.
79.85	The cor. of secs. 23, 24, 25, and 26. Land, rolling mountains. Soil, loam, rich and moist about 2 ft. deep, subsoil, hard clay and gravel. rock or various sizes mixed with soil. No timber. Undergrowth, sage brush and oak. Good grass for grazing. Mountainous land, or land covered with dense undergrowth, 79.86 chs.

October 3, 1910.

October 4, 1910: At 7 h 49 m a.m., l.m.t., I set off 38°01' N.,
on the lat. arc; 4°08'S., on the decl. arc; and determine a
meridian with the solar, at the cor. of secs. 23, 24, 25, and
26.

Thence I run

N. 0° 7' W, bet. secs. 23 and 24.

Over rolling mountainous land; through dense sage and oak
brush.

Subdivision of T.32 S., R.7 W.-Continued.

Chains	
	Desc.
40.00	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor.. mkd.on brass cap $\frac{1}{4}$ S 23 in W half and S 24 in E half.; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.
51.50	Old road, bears NE and SW.
51.75	Bottom of hollow, 150 ft. below cor., course NE.
	Asc.
54.00	Top of ridge, 60 ft. above hollow, bears NE and SW.
	Desc.
56.00	Foot of descent, 50 ft. below ridge, bears E. and W.
	Enter Buckskin Valley.
	Leave oakbrush, bears E. and W.
80.00	Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground, for cor. of secs. 13, 14, 23, and 24, mkd.on brass cap T 32 S S 13 in NW. R 7 W S 14 in NE. S. 24 in SE.; and S 23 in SW. quadrants; and raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.
	Land, rolling mountains in S. 56.00 chs. sloping northward. and nearly level land in Buckskin Valley on N. 24.00 chs.
	Soil, rich loam about 2 ft. deep, mixed with rock and gravel.
	No timber.
	Undergrowth, sage and oak brush.
	Good grass for grazing.
	Mountainous land, or land covered with dense undergrowth, 80.00 chs.
	N. $89^{\circ}55'$ E., on a random line bet. secs. 13 and 24.
40.00	Set temp. $\frac{1}{4}$ sec. cor.
79.72	Intersect E. bdy. of Tp., 146 lks. S. $0^{\circ}12'$ E. of e. cor. of secs.

Subdivision of T.32 S., R.7 W.-Continued.

Chains

13, 18, 19 and 24, heretofore described.

Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground, for closing cor. of secs. 13 and 24, mkd. on brass cap

T 32 S in N half.

C C R 6 W S 18 S 19 in E half.

R 7 W S 24 in SW.; and

S 13 in NW quadrants; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.

Note : I destroy all marks on the cor. of secs. 13, 18, 19,

and 24, which pertain to secs. 13 and 24. Thence I run S. $89^{\circ}55'W.$ on a true line bet. secs. 13 and 24. Land, nearly level land in Buckskin Valley.

Soil, rich black loam about 3 ft. deep, and mixed with rock

Desc.

2.55 Creek, 1 lk. wide, $\frac{1}{2}$ in. deep, in wash, 30 lks. wide, 4 ft.

deep, course North.

Ascend gradually.

8.55 Trail, bears NW and SE.

39.86 Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor.. mkd. on brass cap $\frac{1}{4}$ S 13 in N half.and S 24 in S half; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, N. of cor. W53.20 Old road, bears N. $15^{\circ}E.$ and S. $15^{\circ}W.$

66.00 Trail, bears NE and SW.

✓ 79.72 The cor. of secs. 13, 14, 23, and 24.

Land, nearly level in Buckskin Valley, sloping gently to the north.

Soil, rich clay loam about 3 ft. deep, mixed with rock and covered with loose~~s~~ rock. It would be difficult to plough the land on account of the rocks. Subsoil, clay and gravel. No timber.

Undergrowth, sage brush.

Good grass.

Land covered with dense undergrowth, 79.72 chs.

October 4, 1910: At this cor. I set off $4^{\circ}13'S.$, on the decl. arc; and at 11 h 49 m a.m., l.m.t., I observe the sun

Subdivision of T.32 S., R.7 W.-Continued.

Chains	on the meridian the resulting lat, is 38°02'N., which is the proper lat.nearly.
	N.0°1'W., bet.secs.13 and 14.
	Over nearly level valley;through dense undergrowth.
	Desc.gently.
54.90	Wash, 30 lks.wide, 3 ft.deep, course N.20°E. Asc.gently.
40.00	Set an iron post, 3 ft.long, 1 in.in dia., 26 ins.in the ground, for $\frac{1}{4}$ sec.cor..mkd.on brass cap $\frac{1}{4}$ S 14 in W half and S 13 in E half;and raise a mound of stone, 2 ft.base, $\frac{1}{2}$ ft.high,W.of cor.✓
69.10	Wash, 10 lks.wide, 2 ft.deep.course N.40°E.
80.00	Set an iron post, 3 ft.long, 2 ins.in dia., 24 ins.in the ground, for cor.of secs.11,12,1,3, and 14,mkd.on brass cap T 32 S S 11 in NW. R 7 W S 12 in NE. S 13 in SE.;and S 14 in SW.quadrants;dig pits,18x18x12 ins.,in each sec.; $5\frac{1}{2}$ ft.dist.and raise a mound of earth, 4 ft.base, 2 ft.high,W.of cor.✓ Land,nearly level. Soil,clay loam about 3 ft.deep,rocky ;3rd rate. No timber. Undergrowth,sage brush. Good grass for grazing. Land,covered with dense undergrowth,80.00 chs.
	October 4, 1910.
	October 5, 1910:At 7 h 49 m.a.m.,l.m.t.,I set off 38°03'N., on

Subdivision of T.32 S., R.7 W.-Continued.

- Chains lat.arc; $4^{\circ}31' S.$, on the decl.arc; and determine a meridian with the solar, at the cor.of secs.11,12,13, and 14.
 Thence I run
 $N.89^{\circ}55' E.$, on a random line bet.secs.12 and 13.
 ✓ 40.00 Set temp. $\frac{1}{4}$ sec.cor.
 ✓ 79.85 Intersect E.bdy.of Tp., 121 lks.South of the cor.of secs. 7,12,13, and 18, heretofore described.
 Set an iron post, 3 ft.long, 2 ins.in dia., 24 ins.in the ground, for closing cor.of secs.12 and 13, mkd.on brass cap T 32 S in N half.
 C C R 6 W S 7 S 18 in E half.
 R 7 W S 13 in SW.and
 S 12 in NW.quadrants; dig pits, $24 \times 18 \times 12$ ins., crosswise on each line, N.and S., 3 ft.and West of post, 7 ft.dist.; and raise a mound of earth, 4 ft.base, 2 ft. high, W.of cor.
 Note:I destroy all marks on the cor.of secs.7,12,13, and 18th pertain to secs.12 and 13.
 Thence I run
 $S.89^{\circ}55' W.$, on a true line bet.secs.12 and 13.
 Over nearly level land in Buckskin Valley; through dense undergrowth.
 Desc.gently.
 26.00 Wash, 40 lks.wide, 3 ft.deep, course N.
 Asc.gently.
 ✓ 39.93 Set an iron post, 3 ft.long, 1 in.in dia., 26 ins.in the ground, for $\frac{1}{4}$ sec.cor..mkd.on brass cap $\frac{1}{4}$ S 12 in N half and S 13 in S half; dig pits, $18 \times 18 \times 12$ ins., E.and W.of post, 3 ft.dist.; and raise a mound of earth, $3\frac{1}{2}$ ft.base, $1\frac{1}{2}$ ft.high, N.of cor.
 53.00 Begin ascent of knoll, bears N.and S.
 57.00 Top of knoll, 30 ft.above valley.
 Desc.
 64.80 Foot of knoll.
 Wash, 20 lks.wide, 2 ft.deep, course N. $10^{\circ} E.$

a Subdivision of T.32 S., R.7 W.-Continued.

Chains	
76.30	Wash, 30 lks. wide, 4 ft. deep, course N.10°E.
79.86	The cor. of secs. 11, 12, 13, and 14. Land, nearly level valley. Soil, clay loam about 3 ft. deep, mixed well with rock and covered with loose rock. too rocky to plough. subsoil, clay. No timber. Undergrowth, sage brush. Good grass for grazing. Land covered with dense undergrowth, 79.86 chs.

Note: The E.bdy. of Tp. being out or limit in alignment,

therefore I run on sectional guide meridian

North. bet. secs. 11 and 12.

Over nearly level valley; through dense sage brush and scattering oak brush.

Asc. gently.

40.00 Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor.. mkd. on brass cap $\frac{1}{4}$ S 11 in W half; and S 12 in E half; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. ✓

56.75 Wash, 15 lks. wide, 4 ft. deep, course NE. Asc.

71.00 Leave valley, bears NE and SW. Asc.

80.00 Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground, for cor. of secs. 1, 2, 11, and 12, mkd. on brass cap
T 32 S S 2 in NW.

R 7 W S 1 in NE.

S 12 in SE.; and

S 11 in SW. quadrants; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. ✓

Land, mountainous on N. 9.00 chs. sloping south, and nearly level valley on south 7100 chs. gently sloping north.

Soil, clay and sandy loam. medium texture, mixed with a few cobble rock.

No timber.

Subdivision of T.32 S., R.7 W.-Continued.

Chains

Undergrowth, dense sage brush and scattering oak.

Good grass for grazing.

Mountainous land, or land covered with dense undergrowth.

80.00 chs.

October 5, 1910: At this cor. I set off 4°36'S. on the decl. arc; and at 11 h 49 m a.m., l.m.t., I observe the sun on the meridian, the resulting lat. is 38°03'N., which is the proper lat. nearly.

Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground, for closing cor. of secs. 1 and 12, mkd. on brass cap.

40.00 Set temp. $\frac{1}{4}$ sec.cor.

80.60 Intersect E. bdy. of Tp., 298 lks. S. 1°0' W. of the cor. of secs. 1, 6, 7, and 12, heretofore described.

Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground, for closing cor. of secs. 1 and 12, mkd. on brass cap

T 32 S in N half.

C C R 6 W S 6 S 7 in E half.

R 7 W S 12 in SW.; and

S 1 in NW. quadrants; dig pits, 24x18x12 ins. crosswise on each line N. and S. 3 ft.; and West of post; 7 ft. dist.; and raise a mound of earth, 4 ft. base. 2 ft. high, $\frac{1}{2}$ of cor. Note I destroy all marks on the cor. of secs. 1, 6, 7, and 12, which pertain to secs. 1 and 12.

Thence I run

S. 89°55'W., on a true line bet. secs. 1 and 12.

Over nearly level land; in bottom of Buckskin valley; through dense sage brush and scattering oak brush.

Desc. gently.

40.60 Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for $\frac{1}{4}$ sec.cor.. mkd. on brass cap $\frac{1}{4}$ S 1 in N half and S 12 in S half; dig pits, 18x18x12 ins., E. and W. of post, 3 ft. dist.; and raise a mound of earth, $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft.

Subdivision of T.32 S., R.7 W.-Continued.

Chains	High, N. of cor.
51.65	Wash, 50 lks. wide, 4 ft. deep, course N.20°E. Asc. gently.
74.45	Leave valley, bears N. and South. Asc.
80.60	The cor. of secs. 1, 2, 11, and 12. Land, nearly level valley and E. 74.45 chs. drainage northward W. 5.15 chs. on East slope of hill. Soil, sandy loam, mixed with gravel wash, and some rocks. subsoil, gravel. No timber. Undergrowth, sage brush and oak. Good grass for grazing. Mountainous land, or land covered with dense undergrowth, 80.60 chs.
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Note: Knowing from retracement of the Nibdy. off the Tp. will that closing corners will be necessary at the intersec- tions of lines run from the south; therefore I run N.0°7'E. on a true line bet. secs. 1 and 2. Over mountainous land; through dense sage brush. Asc.	
2.40	Top of spur, 30 ft. above cor., bears N.60°E. and S.60°W. Desc.
15.00	Bottom of hollow, 60 ft. below spur, course SE. Asc.
33.00	Enter heavy cedar timber, bears E. and W.
40.00	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for $\frac{1}{4}$. sec. cor.. mkd. on brass cap $\frac{1}{4}$ S 2 in W half; and S 1 in E half; from which A cedar, 12 ins. dia., bears N.20°E., 38 lks. dist.. mkd. $\frac{1}{4}$ S 1 B T. A pinon pine, 12 ins. dia., bears N.83°W., 75 lks.

Subdivision of T.52 S., R.7 W.-continued.

Chains

dist..mkd. $\frac{1}{4}$ S 2 B T.

44.00 Top of ridge, 300 ft. above hollow, bears E. and W.

Desc.

50.00 Begin more abrupt descent, bears E. and W.

Leave timber, bears E. and W.

72.00 Enter scattering timber, bears E. and W.

88.70 Intersect N.bdy. of Tp., 90 lks. West of the cor. of secs.

1, 2, 35, and 36, heretofore described.

Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground, for closing cor. of secs. 1 and 2, mkd. on brass cap

C C T 31 S R 7 W S 35 S 36 in N half.

R 7 W S 1 in SE.; and

T 32 S S 2 in SW. quadrants; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, S. of cor.;

Note : I destroy all marks on the cor. of secs. 1, 2, 35, and 36, which pertain to secs. 1 and 2.

Land, mountainous S. 44.00 chs. rolling and sloping southward, and draining eastward. N. 44.70 chs. Steep north slope of ridge.

Soil, clay loam, about 2 ft. deep, mixed with rock and coarse gravel. subsoil, beds of gravel and clay.

Timber, cedar and pinon pine on N. 16.70 chs.

Undergrowth, sage brush and some scattering oak brush.

Good grass for grazing.

Mountainous land, or land covered with dense undergrowth, 88.70 chs.

October 5, 1910.

October 6, 1910: At 7 h. 48 m.a.m., l.m.t., I set off $38^{\circ}00'N.$ on the lat.arc; $5^{\circ}54'S.$, on the decl.arc; and determine a meridian with the solar, at the cor. of secs. 26, 27, 34, and 35.

Thence I run

Subdivision of T.32 S., R.7 W.-Continued.

Chains	S.0°01'E., on a true line bet. secs. 34 and 35.
	Over mountainous land; through dense sage and oak and mahogany brush.
Desc.	
2.80	Bottom of hollow, 50 ft. below cor., course S.80°W.
	Asc.
7.35	Top of ridge, 75 ft. above hollow, bears N.40°W. and S.60°E.
	Desc.
19.60	Bottom of hollow, 100 ft. below ridge, course N.40°W.
	Asc.
30.30	Leave oak and sage brush and enter dense mahogany, bears NW and SE.
40.00	Set an iron post, 3 ft. long, 1 in. in dia., 18 ins. in the ground, on bed rock, and surrounded by mound of earth and stone, for $\frac{1}{2}$ sec. cor.. mkd. on brass cap $\frac{1}{4}$ S 34 in W half and S 35 in E half; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. ✓
49.80	Top of spur, 200 ft. above hollow, bears N.80°E. and S.80°W. Leave dense and enter scattering mahogany brush, bears N.80°E. and S.80°W. Enter scattering cedar and pinon pine timber, bears N.80°E. and S.80°W.
	Desc.
53.24	Top of volcanic ledge, 15 ft. high, bears NW and SE.
58.35	Bottom of swale, 50 ft. below spur, course NW.
	Asc.
60.40	Enter heavy cedar and pinon pine timber, bears E. and W.
78.34	Top of ridge, 100 ft. above swale, bears N.10°E. and S.10°W. Intersect South bdy. of Tp., 2.22 chs. N.88°22' E., of the cor. of secs. 34 and 35, heretofore described. Set an iron post, 3 ft. long, 2 ins. in dia., 14 ins. in the ground, on solid rock, and surrounded by mound of earth and stone for closing cor. of secs. 34 and 35, mkd. on brass cap C C T 33 S R 7 W S 2 S 3 in S half. T 32 S S 34 in NW.; and

Subdivision of T.32 S., R.7 W.-Continued.

Chains	R 7 W S 35 in NE.quadrants;from which A pinon pine,6 ins.dia.,bears N.35°E.,36 lks. dist..mkd.T 32 S R 7 W S 35 B T.✓ A pinon pine,6 ins.dia.,bears N.80°W.,45 lks. dist..mkd.T 32 S R 7 W S 34 B T.✓ Note:I destroy all marks on the cor.of sections,34 & 35 which pertain to secs.34 and 35.✓ Land,mountainous. Soil,clay and gravelly;3rd rate.about 12 ins.deep.Subsoil gravel and clay. Timber,cedar and pinon pine. Undergrowth,oak,sage ,and mahogany. A very little grass. Mountainous or heavily timbered land,or land covered with dense undergrowth,78.34 chs. October 6,1910:At the noon hour the sky is overcast and solar observations are impossible. From the cor.of secs.26,27,34, and 35. I run N.0°3'W.betsecs.26 and 27. Over mountainous land;through dense sage and oak brush. Asc. 12.40 Old road,bears N.80°W.and S.80°E. 20.00 Top of ridge,300 ft.above cor.,bears NW and SE. Desc.into Buckskin Valley. 40.00 Set an iron post.,3 ft.long,1 in.in dia.,26 ins.in the ground,for $\frac{1}{4}$ sec.cor..mkd.on brass cap $\frac{1}{4}$ S 27 in W half and S 26 in E half;and raise a mound of stone,2 ft.base, $1\frac{1}{2}$ ft.high,W.of cor.✓ 44.00 Hollow,150 ft.below ridge,course NE. Asc. 61.50 Top of spur,50 ft.above hollow,bears E.and W.
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Subdivision of T.32 S., R.7 W.-Continued.

Chains.

Desc.

68.25 Bottom of hollow, 50 ft. below spur, course E.

Asc.

80.00 Set an iron post, 3 ft. long, 2 ins. in dia., 20 ins. in the ground, on hard pan, and surrounded by mound of earth and stone, for cor. of secs. 22, 23, 26, and 27, mkd. on brass cap

T 32 S S 22 in NW.

R 7 W S 23 in NE.

S 26 in SE.; and

S 27 in SW. quadrants; from which

A mahogany, 6 ins. dia. bears S. 58° E., 115 lks.

dist.. mkd. T 32 S R 7 W S 26 B T.

No other trees within limits.
And raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. Land, mountainous, slopes gradual.

Soil, clay loam, medium texture, about 2 ft. deep, and mixed with volcanic rock. Subsoil, clay and gravel.

No timber.

Undergrowth, dense sage brush and scattering oak.

Good grass for grazing.

Mountainous land, or land covered with dense undergrowth,

80.00 chs.

October 6, 1910.

October 7, 1910: At 7 h 48 m a.m., l.m.t., I set off 38°01' N. on the lat. arc; 5°17'S., on the decl. arc; and determine a meridian with the solar, at the cor. of secs. 22, 23, 26, and 27.

Thence I run

East, on a random line bet. secs. 23 and 26.

40.00 Set temp. $\frac{1}{4}$ sec. cor.

79.96 Intersect N. and S. line, 5 lks. S. of the cor. of secs. 23, 24, 25, and 26.

Thence I run

Subdivision of T.32 S., R.7 W.-Continued.

- Chains S.89°58'W., on a true line bet. secs. 23 and 26.
Over rolling mountainous land; through dense sage and scattering oak brush.
- Asc.
- 10.00 Top of ridge, 50 ft. above cor., bears N. and S.
- Desc.
- 16.50 Hollow, 25 ft. below ridge, course N.25°W.
- Asc.
- 22.50 Top of ridge, 50 ft. above hollow, bears N. and S.
- Desc.
- 28.00 Bottom of hollow, 38 ft. below ridge, course N.10°W.
- Asc.
- 31.00 Top of ridge, 50 ft. above hollow, bears N. and S.
- Desc.
- 39.00 Wash, 50 lks. wide, 4 ft. deep, course N.
Continue descent.
- 39.98 Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for $\frac{1}{2}$ sec. cor. mkd. on brass cap $\frac{1}{4}$ S 23 in N half and S 26 in S half; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, N. of cor.
- 49.50 Old road, bears NE and SW.
- 53.00 Bottom of hollow, 100 ft. below ridge, course NE. Asc.
- 79.96 The cor. of secs. 22, 23, 26, and 27. 200 ft. above hollow.
Land, rolling hills and hollows draining northward into Buckskin valley.
Soil, rich clay loam about 3 ft. deep, mixed with volcanic rock. subsoil, clay and gravel.
No timber.
Undergrowth, sage and oak brush.
Good grass for grazing.
Mountainous land, or land covered with dense undergrowth, 79.96 chs.
- N.0°7'W., bet. secs. 22 and 23.

Subdivision of T.32 S., R.7 W.-Continued.

Chains	Over rolling mountainous land; through dense undergrowth.
11.80	Bottom of hollow, 75 ft. below cor., course E. Asc.
20.00	Top of ridge, 50 ft. above hollow, bears E. and W. Desc.
37.00	Bottom of hollow, 50 ft. below ridge, course E. Asc.
40.00	Set an iron post, 3 ft. long, 1 in. in dia., 16 ins. in the ground, on solid rock, and surrounded by mound of earth and stone, for $\frac{1}{4}$ sec.cor.. mkd. on brass cap $\frac{1}{4}$. S 22 in W half; and S 23 in E half; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.
40.50	Top of ridge, 40 ft. above hollow, bears E. and W. Desc.
50.00	Foot of descent, 50 ft. below ridge, bears E. and W. Enter Buckskin valley.
80.00	Set an iron post, 3 ft. long, 2 ins. india., 24 ins. in the ground, for cor. of secs. 14, 15, 22, and 23, mkd. on brass cap T 32 S S 15 in NW. R 7 W S 14 in NE.. S 23 in SE.; and S 22 in SW. quadrants; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. Land, rolling mountains sloping and draining East, on S. 50.00 chs. and nearly level land in Buckskin Valley on N. 30.00 chs. Soil, rich clay loam mixed with gravel, about 3 ft. deep, subsoil, hard clay. No timber. Undergrowth, oak and sage brush. Good grass in patches. Mountainous land, or land covered with dense undergrowth, 80.00 chs. October 7, 1910; At this cor. I set off 5°22'S., on the decl.

Subdivision of T.32 S., R.7 W.-Continued.

- Chains arc; and at 11 h 48 m a.m., l.m.t., I observe the sun on the meridian, the resulting lat. is $38^{\circ}02'N.$, which is the proper lat. nearly.
- N. $89^{\circ}58'E.$, on a random line bet. secs. 14 and 23.
- 40.00 Set temp. $\frac{1}{4}$ sec.cor.
- 79.90 Intersect N. and S.line, at the cor.of secs. 13, 14, 23, and 24. Thence I run S. $89^{\circ}58'W.$, on a true line betsecs. 14 and 23. Over nearly level land; through dense undergrowth. Desc.gently.
- 16.50 Wash, 30 lks.wide, 3 ft.deep, coarse N. $35^{\circ}E.$. Asc.gently.
- 59.95 Set an iron post, 3 ft.long, 1 in.in dia., 26 ins.in the ground, for $\frac{1}{4}$ sec.cor.. mkd.on brass cap $\frac{1}{4}$ S 14 in N half. and S 23 in S.half; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft.high, N.of cor.
- 79.90 The cor.of secs. 14, 15, 22, and 23. Land, nearly level land in Buckskin Valley.sloping gently to the northeast and draining northeast. Soil, rich clay loam mixed with gravel and rock about 18 ins.deep, too rocky to be cultivated readily. Subsoil, clay. No timber. Undergrowth, oak and sage brush. Good grass for grazing. Land covered with dense undergrowth, 79.90 chs.

October 7, 1910.

October 8, 1910: At 7 h 48 m a.m., l.m.t., I set off $38^{\circ}02'N.$ on the lat.arc; $5^{\circ}40'S.$, on the decl.arc; and determine a meridian with the solar, at the cor.of secs. 14, 15, 22, and 23.

Subdivision of T.32 S., R.7 W.-Continued.

Chains	
	Thence I run
	N.0°1'W., bet. secs. 14 and 15.
	Over nearly level land; in Buckskin Valley, through dense sage and oak brush.
	Asc. gently.
19.00	Wash, 25 lks. wide, 2 ft. deep, course NE.
	Leave valley and ascend, bears NE and SW.
30.00	Enter scattering cedar and pinon pine timber, bears N.80° E. and S.80°W.
32.25	Top of spur, 100 ft. above valley, bears E. and W.
	Desc.
36.40	Bottom of gulch, 50 ft. below ridge, course E.
	Asc.
40.00	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for $\frac{1}{2}$ sec. cor. mkd. on brass cap $\frac{1}{4}$ S 15 in W half and S 14 in E half; from which
	A cedar, 6 ins. dia., bears S.5°E. 147 lks.
	dist.. mkd. $\frac{1}{4}$ S 14 B T.
	A pinon pine, 6 ins. dia., bears S.82°W., 60 lks.
	dist.. mkd. $\frac{1}{4}$ S 15 B T. ✓
46.75	Top of spur, 100 ft. above gulch, bears E. and W.
	Desc.
53.00	Bottom of swale, 70 ft. below spur, course E. of
	Asc.
79.35	Top of spur, 250 ft. above swale, bears N.85°E. and S.85°W.
	Desc.
80.00	Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground, for cor. of secs. 10, 11, 14, and 15, mkd. on brass cap
	T 32 S S 10 in NW.
	R 7 W S 11 in NE.
	S 14 in SE.; and
	S 15 in SW. quadrants; from which
	A mahogany, 8 ins. dia., bears N.56°E., 57 lks.
	dist.. mkd. T 32 S R 7 W S 11 B T. ✓
	A mahogany, 7 ins. dia., bears S.61°W., 116 lks.

Subdivision of T.32 S., R.7 W.-Continued.

Chains

dist..mkd.T 32 S R 7 W S 15 B T.

A mahogany, 6 ins.dia., bears N.10°W., 138 lks.

dist..mkd.T.32 S.,R.7 W S 10 B T.

No other trees within limits; raise a mound of stone, 2 ft base, $1\frac{1}{2}$ ft. high, W.of cor.

Land, on S.19.00 chs.on nearly level valley, slopes and drains northeast .Soil, sandy loam from 12 to 18 ins.deep, on lava rock subsoil.No timber but dense covered with oak and sage brush.Good grass .N.61.00 chs.on mountainous land, general slope and drainage northeasterly.Soil, sandy and gravelly and covered with loose rock.Subsoil, rock.

Timber, cedar and pinon pine, Undergrowth, oak, sage and mahogany. Good grass in patches.

Mountainous land, or land covered with dense undergrowth, 80.00 chs.

N.89°58'E., on a random line betsecs.11 and 14.

40.00 Set temp. $\frac{1}{4}$ sec.cor.

79.98 Intersect N.and S.line, 5 lks.N.of the cor.of secs.11,12, 13, and 14.

Thence I run

West, on a true line betsecs.11 and 14.

Over nearly level land in Buckskin Valley; through dense sage and oak brush.

Desc.

5.50 Wash, 10 lks.wide, 5 ft.deep, course N.

Asc.gradually.

30.00 Leave valley, bears NE and SW.

Asc.

34.00 Enter scattering cedar and pinon pine timber, bears NE and SW.

39.99 Set an iron post, 3 ft.long, 1 in.in dia., 26 ins.in the ground, for $\frac{1}{4}$ sec.cor..mkd.on brass cap $\frac{1}{2}$ S 11 in N half.

Subdivision of T.32 S., R.7 W.-Continued.

Chains	S 14 in S half; from which A pinon pine, 24 ins. in dia., bears S.37°W., 15 lks. dist..mkd. $\frac{1}{4}$ S 14 B.T. A cedar, 6 ins. dia., bears N.28°E., 21 lks. dist..mkd. $\frac{1}{4}$ S 11 B.T.✓
79.98	The cor.of secs.10,11,14, and 15. E.50.00 chs.over rolling valley land.Soil,sandy loam, soft and loose;gravelly subsoil.No rock .No timber.Under- growth;sage and oak brush.Good grass.W.49.98 chs.over east and northeast slopes of ridge;rocky and steep.Soil, sandy and clay loam;about 6 in.deep,rocky subsoil.Timber, cedar and pinon pine.Undergrowth,oak,sage, and mahogany. Good grass for grazing. Mountainous land,or land covered with dense undergrowth, 79.98 chs.
	October 8,1910:At this cor,I set off 5°45'S.,on the decl. arc;and at 11 h 48 m a.m.,l.m.t.,I observe the sun on the meridian the resulting lat.is 38°03'N.,which is the proper lat.nearly.
	N.0°1'W.,betsecs.10 and 11. Over mountainous land;through scattering timber and dense undergrowth.
	Desc.
5.50	Bottom of hollow,100 ft.below cor.,course E.
	Asc..
18.00	Top of main ridge,100 ft.above hollow,bears NE and SW.
	Desc.
40.00	Set an iron post,3 ft.long,1 in.in dia.,26 ins.in the ground,for $\frac{1}{4}$ sec.cor..mkd.on brass cap $\frac{1}{4}$ S 10 in W half and S 11 in E half;from which A mahogany,6 ins.dia.,bears S.18°E.,62 lks.

Subdivision T.32 S., R.7 E.-Continued.

Chains

mhd. 1 S 11 B T.

A mahogany, 6 ins. dia., bears S.22°W., 52 lks.

dist..mhd. 1 S 10 B T.

57.50 Bottom of hollow, 100 ft. below ridge, course N.85°W.

Asc.

65.50 Top of spur, 75 ft. above hollow, bears N.75°E. and S.75°W.

Desc.

72.00 Bottom of hollow, 90 ft. below spur, course S.75°W.

Asc.

80.00 Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground, for cor. of secs. 2, 3, 10, and 11!, mkd. on brass cap

T 32 S S 3 in NW.

R 7 W S 2 in NE.

S 11 in SE.; and

S 10 in SW quadrants; from which

A cedar, 11 ins. dia., bears N.11°E., 74 lks.

dist..mhd. T 32 S R 7 W S 2 B T.

A cedar, 5 ins. dia., bears S.25°E., 39 lks.

dist..mhd. T 32 S R 7 W S 11 B T.

A pinon pine, 5 ins. dia., bears S.62°W., 55 lks.

dist..mhd. T 32 S R 7 W S 10 B T.

A pinon pine, 6 ins. dia., bears N.31°W., 195 lks.

dist..mhd. T 32 S R 7 W S 3 B T.

Land, S.16.00 chs. over rolling mountainous land; slopes and drains northeasterly, rocky and covered with dense sage, oak, and mahogany brush and scattering timber. Soil, sandy loam about 1 ft. deep, subsoil gravelly. S.62.00 chs. over broken ridges and hollows. Slopes westerly. Soil, sandy loose and dry about 1 ft. deep, clay subsoil, covered with dense undergrowth, also patches of volcanic rock slides. Timber, cedar and pinon pine. Very good grass.

Mountainous land, or land covered with dense undergrowth, S.1.00 chs.

Subdivision of T.32 S., R.7 W.-Continued.

Chains

October 10, 1910: At 7 h 47 m a.m., i.m.t., I set off 38°03' N., on the lat.arc; 6°26'S., on the decl.arc; and determine a meridian with the solar, at the cor.of secs. 2, 3, 10, and 11.

Thence I run

East, on a random line bet. secs. 2 and 11.

40.00 Set temp. $\frac{1}{4}$ sec.cor.

80.00 Intersect N. and S.line, 5 lks.S. ~~west~~ of the cor.of secs. 1, 2, 11, and 12.

Thence I run

S.89°58'W., on a true line bet. secs. 2 and 11.

Over mountainous land; through dense sage and oak brush.

Asc.along ~~south~~ south slope of ridge.

26.00 Top of knoll, 125 ft.above cor., on top of ridge, ridge bears N.80°E. and S.W.

Desc.

36.35 Bottom of hollow, 100 ft.below knoll, course NE.

Asc.

40.00 Set an iron post, 3 ft.long, 1 in.in dia., 26 ins.in the ground, for $\frac{1}{4}$ sec.cor.. mkd.on brass cap $\frac{1}{4}$ S 2 in N half and S 11 in S half; and raise a mound of stone, 2 ft.base, $1\frac{1}{2}$ ft.high.N.of cor.

43.60 Enter scattering timber, bears N.10°W. and S.20°W.

63.60 Top of main ridge, bears N.5°E. and S.5°W., 200 ft.above hollow,

Desc.

80.00 The cor.of secs. 2, 3, 10, and 11.60 ft.below ridge.,

E.63.60 chs.over low rolling hills and hollows sloping and draining easterly into Buckskin Valley. Soil, sandy loam; 2nd rate. subsoil, gravelly. Timber scattering cedar and pinon pine. Undergrowth, sage and oak brush. Good grass .W.

16.40 chs.over west slope of mountain. rocky slope. Soil, sandy and clay loam about 1 ft.deep, mixed with rock.

Timber, cedar and pinon pine. Undergrowth, sage brush and

Subdivision of T.52 S., R.7 W.-Continued.

Chains

scattering oak. Good grass.

Mountainous land, or land covered with dense undergrowth,
80.00 chs.October 10, 1910: At this cor. I set off 6°31'S., on the decl.
arc; and at 11 h 47 m a.m., l.m.t., I observe the sun on the
meridian, the resulting lat. is 38°03'N., which is the
proper lat. nearly.

October 10, 1910.

John R Stewart
Instrumentman G.L.O.

October 11, 1910.

Note: For reasons hereinafter explained, I run
S.89°55'W., on a true line bet. secs. 3 and 10.Over mountainous land; through heavy cedar and pinon pine
timber and dense oak, sage, and mahogany brush.

Asc.

ft.

4.00 Top of spur, 90 ft. above cor., bears N. and S.

Desc.

17.60 Bottom of hollow, 200 ft. below spur, course SW.

Asc. abruptly.

23.00 Top of spur, 200 ft. above hollow, bears NE and SW.

Desc.

29.40 Desc. abruptly over ledges, bears N. and S.

39.00 Bottom of hollow, 200 ft. below spur, course N.70°W. This is
same hollow crossed as 17.60 chs.

Asc.

40.00 Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the
ground, for $\frac{1}{2}$ sec. cor.. mkd. on brass cap $\frac{1}{4}$ S 3 in N half
and S 10 in S half; from which

A pinon pine, 6 ins. dia., bears N.48°W., 9 lks.

dist.. mkd. $\frac{1}{4}$ S 3 B T.

A cedar, 10 ins. dia., bears S.63°W., 45 lks.

dist.. mkd. $\frac{1}{4}$ S 10 B T.44.00 Top of spur, 80 ft. above hollow, bears N.70°W. and S.70°E.
Desc. abruptly.

53.90 Bottom of hollow, 75 ft. below spur, course N.60°W.

Subdivision of T.32 S., R.7 W.-Continued.

Chains	
	Asc.
10.00	Top of spur, 80 ft. above cor., bears NE and SW.
	Desc.
17.00	Head of hollow, 40 ft. below spur, course S.70°W.
	Asc.
27.25	Top of ridge, 100 ft. above hollow, bears E. and W.
	Desc.
40.00	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor.. mkd. on brass cap $\frac{1}{2}$ S 3 in N half; and S 2 in E half; from which
	A pinon pine, 5 ins. dia., bears N.43°E., 45 lks. dist., mkd. NW $\frac{1}{2}$ S 2 B.T.
	A pinon pine, 7 ins. dia., bears N.56°W., 16 lks. dist.. mkd. S 3 B.T.
43.00	Bottom of swale, 100 ft. below ridge, course N.60°W.
	Asc.
50.00	Top of spur, 100 ft. above swale, bears E. and W.
	Desc. abruptly.
88.80	Intersect N.bdy. of Tp., 62 lks. East of the cor. of secs. 2, 3, 34, and 35, heretofore described.
	Set an iron post, 3 ft long, 2 ins. in dia., 24 ins. in the ground, for closing cor. of secs. 2 and 3. mkd. on brass cap C C T 31 S R 7 W S 34 S 35 in N half.
	R 7 W S 2 in SE.; and
	T 32 S S 3 in SW quadrants; from which
	A pinon pine, 10 ins. dia., bears S.80°E., 50 lks. dist.. mkd. T 32 S R 7 W S 2 B.T.
	A cedar, 8 ins. dia., bears S.80°W., 60 lks. dist.. mkd. T 32 S R 7 W S 3 B.T.
	Note: I destroy all marks on the cor. of secs. 2, 3, 34, and 35, which pertain to secs. 2 and 3.
	Land, rough and broken ridges and hollows.
	Soil, sandy loam about 3 ft. deep, subsoil, rock.
	Timber, cedar and pinon pine.
	Undergrowth, sage brush and oak.

Subdivision of T. 32 S., R. 7 W.-Continued.

Chains
Asc.
69.00 Begin abrupt ascent, bears N. and S.
72.60 Top of spur, 70 ft. above hollow, bears N. and S.
Desc.
79.90 Intersect N. and S. line, 4.90 chs. South of the cor. of secs.
3, 4, 9, and 10, heretofore described.
Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the
ground, for closing cor. of secs. 3 and 10, mkd. on brass cap
T 32 S R 7 W in N. half.
C C S 4 S 9 in W. half;
S. 3 in NE.; and
S 10 in SE.; quadrants; from which
A pinon pine, 10 ins. dia., bears N. 85° E., 50 lks.
dist.. mkd. T 32 S R 7 W S 3 B.T.
A pinon pine, 10 ins. dia., bears S. 53° E., 10 lks.
dist.. mkd. T 32 S R 7 W S 10 B.T.

Note: I destroy all marks on the cor. of secs. 3, 4, 9, and 10
which pertain to secs. 3 and 10. ✓

Entire mile over rough broken ridges and hollows. Cover
with volcanic rock. Soil, sandy loam about one foot deep,
mixed with rock. Subsoil rock. Timber, heavy cedar and
pinon pine. Undergrowth, scattering sage oak, and mahogany.
Grass in patches.

Mountainous or heavily timbered land, 79.90 chs.

October 11, 1910.

Dunby Stewart,
Instrumentman. G. L. O.

October 10, 1910.

For reasons already explained I run
N. 0° 7' E., on a true line bet. secs. 2 and 3.
over mountainous land; through heavy cedar and pinon pine
timber and dense oak, sage and mahogany brush.

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Subdivision of T.32 S., R.7 W.-Continued.

Chains	Good grass for grazing. Mountainous or heavily timbered land, or land covered with dense undergrowth, 88.80 chs.
	October 10, 1910. <i>John R Stewart</i> Instrumentman G.L.O.
	October 8, 1910: At 7 h 48 m a.m., l.m.t., I set off 58°00' N., on the lat.arc; 5°40' S., on the decl.arc; and determine a meridian with the solar, at the cor.of secs. 27, 28, 33, and 34. Thence I run S.0°02'E., betsecs. 33 and 34. Over mountainous land; through heavy cedar and pinon pine timber and volcanic boulders. Asc. 5.00 Top of ridge, 50 ft above cor., bears N.70°E. and S.70°W. Desc. 10.00 Bottom of hollow, 40 ft. below ridge, course S.40°W. Asc. 21.25 Top of ridge, 100 ft. above hollow, bears NE and SW. Desc. 35.00 Leave timber, bears NE and SW. Enter dense sage brush, bears E. and W. 40.00 Set an iron post, 3 ft long, 1 in. in dia., 16 ins. in the ground, on best rock, and surrounded by mound of earth and stone, for $\frac{1}{2}$ sec.cor.. mkd.on brass cap $\frac{1}{2}$ S 33 in W half and S 34 in E. half; and raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$ ft. high, W. of cor. 44.00 Foot of descent, bears E. and W.; bottom of Cottonwood Canon. 45.50 Road, bears E. and W. 47.00 Cottonwood Creek, 3 lks. wide, 4 ins. deep, course W. 50.00 Leave canon bottom, bears E. and W. Asc. abruptly. Enter dense oak brush and leave sage brush, bears E. and W.

Subdivision of T.32 S., R.7 W.-Continued.

Chains	
65.00	Top of spur, 200 ft. above canon, bears E. and W. Desc.
65.50	Enter heavy timber, bears E. and W.
73.00	Bottom of canon, 100 ft. below spur, course N.30°W. Asc.
73.25	Leave heavy and enter scattering timber, bears N.30°W. and S.30°E.
78.90	Intersect S.bdy.of Tp., 258 lks. N.89°44'E., of cor.of secs. 33 and 34, heretofore described. Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground, for closing cor.of secs.33 and 34, mkd.on brass cap C C T 33 S R 7 W S 3 S 4 in S half. T 32 S S 33 in NW.; and R 7 W S 34 in NE. quadrants; from which A pinon pine, 7 ins. dia., bears N.48°15'E., 40 lks. dist..mkd.T 32 S R 7 W S 34 B T. A pinon pine, 5 ins. dia., bears N.38°10'W., 50 lks. dist..mkd.T 32 S R 7 W S 33 B T.
	Note:I destroy all marks on the cor.of secs.33 and 34, which pertain to secs.33 and 34.
	Land, rough mountain ridges and hollows, steep slopes and rocks .
	Soil, clay loam mixed with gravel about 1 ft. deep, subsoil clay and gravel.
	Timber, cedar and pinon pine.
	Undergrowth, oak and sage brush.
	Good grass for grazing.
	Mountainous or heavily timbered land, or land covered with dense undergrowth, 78.90 chs.
	W. side. N. introd., 800 ft., N.0°4'W., betsecs.27 and 28.
	Over mountainous land through heavy cedar and pinon pine timber.
	Desc.over volcanic rocks.

Subdivision of T.32 S., R.7 W.-Continued.

Chains

- 15.60 Bottom of hollow, 50 ft. below cor., course S.70°W.
Asc.
- 24.80 Top of ridge, 100 ft. above hollow, bears NE and SW.
Desc.
- 31.50 Head of hollow, 50 ft. below ridge, course SW.
Asc.
- 36.50 Top of ridge, 100 ft. above hollow, bears N.70°E. and S.70°W.
Desc.
- 40.00 Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for $\frac{1}{2}$ sec.cor.. mkd. on brass cap $\frac{1}{4}$ S 28 in W. half and S 27 in E. half; from which
A pinon pine, 8 ins. dia., bears N.38°30'E., 18 lks.
dist.. mkd. $\frac{1}{4}$ S 27 B T.
A pinon pine, 10 ins. dia., bears N.42°30'W., 12 lks.
dist.. mkd. $\frac{1}{4}$ S 28 B T.
- 42.20 bottom of hollow, 100 ft. below ridge, course SW. Asc.
49.00 Top of ridge, 200 ft. above hollow, bears NE and SW.
Desc.
- 62.00 Bottom of hollow, 25 ft. below ridge, course S.30°W.
Asc.
- 80.00 Set an iron post, 3 ft. long, 2 ins. in dia., 12 ins. in the ground, on bed rock, and surrounded by mound of stone, for cor. of secs. 21, 22, 27, and 28, mkd. on brass cap
T 32 S S 21 in NW.
R 7 W S 22 in NE.
S 27 in SE.; and
S 28 in SW. quadrants; from which
A pinon pine, 8 ins. dia., bears N.67°E., 57 lks.
dist.. mkd. T 32 S R 7 W S 22 B T.
A pinon pine, 20 ins. dia., bears S.58°45'E., 109 lks.
dist.. mkd. T 32 S R 7 W S 27 B T.
A pinon pine, 12 ins. dia., bears S.17°15'W., 60 lks.
dist.. mkd. T 32 S R 7 W S 28 B T.
A cedar, 8 ins. dia., bears N.48°15'W., 84 lks.
dist.. mkd. T 32 S R 7 W S 21 B T. ✓

Subdivision of T.32 S., R.7 W.-Continued.

Chains

Land, mountainous rough and rocky slopes and drains southwesterly into Cottonwood canon.

Soil, clay loam, but very rocky, about 2 ft. deep, subsoil rock.

Timber, heavy cedar and pinon pine.

A very little grass.

Mountainous or heavily timbered land, 80.00 chs.

October 8, 1910: At the noon hour the sky is overcast and solar observations are impossible.

East, on a random line bet. secs. 22 and 27.

40.00 Set temp. $\frac{1}{4}$ sec. cor.

80.06 Intersect N. and S. line, at the cor. of secs. 22, 23, 26, and 27.

Thence I run

West, on a true line bet. secs. 22 and 27.

Over mountainous land; through dense sage and scattering mahogany and oak brush.

Asc.

15.00 Top of ridge, 200 ft. above cor., bears N. and S.

Desc.

31.00 Head of hollow, 50 ft. below ridge, course S.

Asc.

31.50 Leave dense sage and enter scattering sage and dense oak brush, bears N. and S.

40.03 Set an iron post, 3 ft. long, 1 in. in dia., 16 ins. in the ground, on bed rock, and surrounded by mound of earth and stone, for $\frac{1}{4}$ sec. cor.. mkd. on brass cap $\frac{1}{4}$ S 22 in N half and S 27 in S half; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, N. of cor.

Leave dense oak and enter dense sage brush, bears N. and S.

Subdivision of T.32 S., R.7 W.-Continued.

Chains

- 51.20 Foot of conglomerate ledge, 50 ft. high, bears N. and S.
- 53.90 Top of spur, (rocky), 200 ft. above hollow, bears N. and S.
Desc. over ledges.
- 55.60 Leave ledges, bears N. and S.
Enter heavy cedar and pinon pine timber, bears N. and S.
- 80.06 The cor. of secs. 21, 22, 27, and 28.
Land, mountainous . broken and covered with rocks and
ledges.slopes and drains southward into cottonwood canon.
Soil, clay loam mixed with volcanic rock. Subsoil, clay and
rock.
Timber, cedar and pinon pine.
Undergrowth, oak, sage, and mahogany.
Good grass for grazing.
Mountainous or heavily timbered land, or land covered
with dense undergrowth, 80.06 chs.

October 8, 1910.

October 10, 1910: At 7 h 47 m a.m., l.m.t., I set off $38^{\circ}01'N.$,
on the lat.arc; $8^{\circ}26'S.$, on the decl.arc; and determine a
meridian with the solar at the cor. of secs. 21, 22, 27, and
28.

Thence I run N.E. set off west

West, on a random line bet. secs. 21 and 28.

- 40.00 Set temp. $\frac{1}{4}$ sec.cor.
80.30 Intersect N. and S.line, 4.76 chs. South of the cor. of secs.
20, 21, 28, and 29. heretofore described.
The falling line is out of limits; therefore I
Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the
ground, for closing cor. of secs. 21 and 28, mkd. on brass cap

T 32 S R 7 W in N half.

C C S 20 S 29 in W.half.

S 21 in NE.; and

S 28 in SE. quadrants; from which

Subdivision of T.32 S., R.7 W.-Continued.

Chains

A pinon pine, 7 ins. dia., bears N.50°E., 60 lks.

dist..mkd.T 32 S R 7 W S 21 B T.

A pinon pine, 6 ins. dia., bears S.30°E., 50 lks.

dist..mkd.T 32 S R 7 W S 28 B T.

Note:I destroy all marks on the cor. of secs. 20, 21, 28, and 29, which pertain to secs. 21 and 28.

Thence I run

East, on a true line bet. secs. 21 and 28.

Over mountainous land; through heavy cedar and pinon pine timber.

Asc.

9.00 Top of ridge, 100 ft. above cor., bears N.15°E. and S.15°W.

Desc.

15.00 Bottom of hollow, 50 ft. below ridge, course S.50°W.

Asc.

40.15 Set an iron post, 3 ft. long, 1 in. in dia., 26 ins., in the ground, for $\frac{1}{4}$ sec.cor..mkd.on brass cap $\frac{1}{4}$ S 21 in N half and S 28 in S half; from which

A pinon pine, 20 ins. dia., bears N.50°W., 78 lks.

dist..mkd. $\frac{1}{4}$ S 21 B T.

A pinon pine, 24 ins. dia., bears S.71°E., 58 lks.

dist..mkd. $\frac{1}{4}$ S 28 B T.

41.00 Top of ridge, 150 ft. above hollow, bears N. and S.

Desc.

48.50 Bottom of hollow, 100 ft. below ridge, course SW.

Asc.

56.25 Top of ridge, 150 ft. above hollow, bears N. and S.

Desc.

70.00 Bottom of hollow, 75 ft. below ridge, course S.

Asc.

80.30 The cor.of secs. 21, 22, 27, and 28.

Land, rough and mountainous with steep slopes and sharp rocky ridges.

Soil, sandy and clay loam; 2nd rate.

Subdivision of T.32 S., R.7 W.-Continued.

Chains	Timber, cedar, and pinon pine. A very little grass. Mountainous or heavily timbered land, 80.30 chs.
	N.0°8' NW bet. secs. 21 and 22.
	Overmountainous land; through heavy cedar and pinon pine timber;
	Asc. abruptly over volcanic ledges.
25.70	Begin more abrupt ascent over precipitous ledges, bears E. and W. Leave timber, bears E. and W.
34.20	Top of ledges, 400 ft. above cor., bears E. and W. Continue ascent.
38.20	Top of ridge, 100 ft. above top of ledges, bears E. and W. Desc. abruptly through dense mahogany brush.
40.00	Set an iron post, 3 ft. long, 1 in. in dia., 12 ins. in the ground, in solid rock, and surrounded by mound of stone, for $\frac{1}{4}$ sec. cor.. mkd. on brass cap $\frac{1}{4}$ S 21 in W half and S 22 in E half; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.
60.00	Enter scattering timber, bears E. and W.
80.00	Point 500 ft. below ridge. Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground, for cor. of secs. 15, 16, 21, and 22, mkd. on brass cap T 32 S 16 in NW. R 7 W S 15 in NE. S 22 in SE.; and S 21 in SW. quadrants; from which A red pine, 12 ins. dia., bears N. 48° E., 12 lks. dist.. mkd. T 32 S R 7 W S 15 B T. A mahogany, 4 ins. dia., bears S. 50° E., 13 lks, dist.. mkd. T 32 S R 7 W S 22 B T. A red pine, 4 ins. dia., bears S. 48° W., 46 lks, dist.. mkd. T 32 S R 7 W S 21 B T.

Subdivision of T.32 S., R.7 W.-Continued.

- Chains A balsam, 5 ins. dia., bears N.44°W., 46 lks.
dist..mkd.T 32 S R 7 W S 16 E T.
- S.38.20 chs.on south slope of ridge, very steep and rocky
Covered with heavy cedar and pinon pine timber except
in the ledges. Soil except in the ledges is rich clay loam;
Mi41.80 is on N.slope of ridge, through dense mahogany
undergrowth and scattering timber balsam and cedar.
Soil,rich loam about 2 ft. deep.
- Mountainous or heavily timbered land, or land covered with
dense undergrowth, 80.00 chs.
- October 10, 1910: At the noon hour the sky is overcast and
solar observations are impossible.
-
- East, on a random line betsecs.15 and 22.
- 40.00 Set temp. $\frac{1}{4}$ sec.cor.
- 80.20 Intersect N.and S.line, 12 lks.S.of the cor.of secs.14,15,
22, and 23.
- Thence I run
S.89°55'W., on a true line betsecs.15 and 22.
Over gently sloping valley land; through dense sage brush
and oak brush.
- Asc.gently.
- 15.00 Leave valley, bears N.and S.
Asc.steep east slope through dense oak and buck brush
and scattering sage brush.
- 40.10 Set an iron post, 3 ft.long, 1 in.in dia., 26 ins.in the
ground, for $\frac{1}{4}$ sec.cor.: mkd.on brass cap $\frac{1}{4}$ S 15 in N half.
and S 22 in S half; from which
- A pinon pine, 10 ins. dia., bears S.87°E., 9 lks.
dist..mkd. $\frac{1}{4}$ S 22 B T.
- No other trees within limits; raise a mound of stone, 2 ft
base, $1\frac{1}{2}$ ft.high, N.of cor.
- 64.50 Top of ridge, 800 ft.above valley, bears N.20°E.and S.20°

Subdivision of T.32 S., R.7 W.-Continued.

Chains	W. 32 S R 7 W S 16 B T.
	Enter dense mahogany and oak brush and heavy cedar and pinon pine and balsam timber.
	Desc. abruptly.
80.20	The cor.of secs.15,16,21, and 22. E.15.00 chs.in valley gentle slope E.Soil,rich sandy and clay loam abot 2 ft.deep,white clay subsoil.From 15.00 chs.point to 64.50 chs.point on east slope of ridge,rocky and steep.W.35.65 chs.on steep west slope of ridge.soil rich loam about 2 ft.deep.timber cedar and pinon pine and balsam.Undergrowth,sage,oak, and mahogany.Good grass. Mountainous or heavily timbered land,or land covered with dense undergrowth,80.20 chs.
	October 10,1910.
	October 12,1910:At 7 h 47 m a.m.,1 m.t.,I set off $38^{\circ}02'N$. on the lat.arc; $7^{\circ}12'S.$,on the decl.arc;and determine a meridian with the solar,at the cor.of secs.15,16,21, and 22.
	Thence I run West, on a random line betsecs.16 and 21.
40.00	Set temp.1 sec.cor.
80.20	Intersect N.and S.line,4.62 chs.South of the cor.of secs.16,17,20, and 21,heretofore described. Set an iron post,3 ft.long,2 ins.in dia.,24 in .in the ground,for closing cor.of secs.16 and 21,mkd.on brass cap T 32 S R 7 W in N half. S C S 17 S 20 in W half. S 16 in NE.;and S 21 in SE.quadrants;from which A cedar,6 ins.dia.bears N. $17^{\circ}E.$,34 lks. dist.mkd.T 32 S R 7 W S 16 B T. A cedar,6 ins.dia.,bears S. $40^{\circ}E.$,34 lks. dist..mkd.T 32 S R 7 W S 21 B T,

Subdivision of T.32 S., R.7 W.-Continued.

Chains

Note:I destroy all marks on the cor.of secs.16,17,20, and 21, which pertain to secs.16 and 21.

Thence I run

East, on a true line bet.secs.16 and 21.

Over mountainous land; through heavy cedar and pinon pine timber.

Asc.

14.75 Top of ridge, 100 ft. above cor., bears N.75°W. and S.75°E.

Desc.

24.50 Bottom of hollow, 125 ft. below ridge, course N.80°W.

Asc.

40.10 Top of spur, 100 ft. above hollow, bears N.30°E. and S.30°W.

W.

Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for $\frac{1}{4}$ sec.cor.. mkd.on brass cap $\frac{1}{4}$ S 16 in N half and S 21 in S half; from which

A cedar, 7 ins.dia., bears N.16°E., 51 lks.

dist..mkd. $\frac{1}{4}$ S 16 B.T.

A pinon pine, 5 ins.dia., bears S.54°W., 66 lks.

dist..mkd. $\frac{1}{4}$ S 21 B.T.

58.70 Bottom of swale, 60 ft. below spur, course S.30°W.

Asc.

80.20 The cor.of secs.15,16,21, and 22.

Land, rough and broken mountain ridges and hollows. with steep rocky slopes. drainage westerly.

Soil, sandy loam about 1 ft. deep, and mixed with rock and gravel. Subsoil, lava and gravel beds.

Timber, cedar and pinon pine.

Undergrowth, a few scattering oak, sage and mahogany brush.

Good grass for grazing.

Mountainous or heavily timbered land, 80.20 chs.

N.0°2'W., on a random line bet.secs.15 and 16.

Subdivision of T.32 S., R.7 W.-Continued.

Chains

40.00 Set temp. 1 sec.cor.

84.90 Intersect E. and W. line, 2 lks.E. of the cor. of secs. 9, 10, 15, and 16, heretofore described.

Thence I run

S.0°3'E., on a true line bet. secs. 15 and 16.

Over mountainous land; through heavy timber and scattering undergrowth.

Desc.

8.20 Bottom of hollow, 50 ft. below cor., course W.

Asc.

9.70 Top of spur, 50 ft. above hollow, bears E. and W.

Desc.

14.70 Bottom of canon, 200 ft. below ridge, course NW.

Asc. abruptly.

Leave heavy and enter scattering timber, bears NW and SE.

Enter dense mahogany and oak brush, bears NW and SE.

44.90 Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for $\frac{1}{4}$ sec.cor.. mkd. on brass cap $\frac{1}{4}$ S 16 in W half and S 15 in E half. and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. ✓

61.20 Top of ridge, 60 ft. above canon, bears E. and W.

Desc.

63.00 Leave dense and enter scattering undergrowth, bears E. and W.

80.20 Bottom of canon, 400 ft. below ridge, course W.

Asc. abruptly.

84.90 The cor. of secs. 15, 16, 21, and 22.

Land, mountainous high and steep ridges and deep canons, drainage west and northwest into Parowan Valley.

Soil, clay and sandy loam from 1 to $1\frac{1}{2}$ ft. deep, and mixed with volcanic rock and sandstone. Subsoil, rock and gravel. Timber, cedar, pinon pine, and red pine and balsam.

Undergrowth, oak, sage, and mahogany.

Good grass for grazing.

Mountainous or heavily timbered land, or land covered

Subdivision of T.32 S., R.7 W.-Continued.

Chains	with dense undergrowth, 84.90 chs. October 12, 1910: At this cor. I set off 7° 16' S., on the decl. arc; and at 11 h. 47 m a.m., l.m.t., I observe the sun on the meridian, the resulting lat. is 38°02' N., which is proper lat. nearly.
	From the cor. of secs. 9, 10, 15, and 16, I run N. 89°55' E., on a random line bet. secs. 10 and 15.
40.00	Set temp. $\frac{1}{4}$ sec. cor.
80.02	Intersect N. and S. line, 5.00 chs. N. of the cor. of secs. 10, 11, 14, and 15. The falling is out of limits; therefore I begin at the cor. of secs. 10, 11, 14, and 15. Thence I run S. 89°55' W., on a true line bet. secs. 10 and 15. Over mountainous land; through scattering timber and dense undergrowth. Asc.
17.00	Top of ridge, 100 ft. above cor., bears N. 50° E. and SW.
	Desc.
35.00	Bottom of swale, 200 ft. below ridge, course N. Asc.
40.01	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor. mkd. on brass cap $\frac{1}{4}$ S 10 in N half. and S 15 in S half; from which A mahogany, 5 ins. dia., bears N. 10° E., 40 lks. dist.. mkd. $\frac{1}{4}$ S 10 B T.
	A mahogany, 6 ins. dia., bears S. 47°30' W., 83 lks. dist.. mkd. $\frac{1}{4}$ S 15 B T.
47.00	Top of ridge, 100 ft. above swale, bears N. 30° W. and S. 30° E. Leave undergrowth and enter heavy timber, bears N. 30° W.

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Subdivision of T. 32 S., R. 7 W.—Continued.

Chains.	. and S.30°E.
	Desc.
73.00	Bottom of hollow, 500 ft. below ridge, course S.60°W.
	Asc.
80.02	Intersect N.and S.line 5.00 chs.S.0° 3'E.of the cor.of secs.9,10,15, and 16, Set an iron post 3 ft.long, 1 in.in dia., 13 ins.in the ground, on bed rock, and surrounded by mound of earth and stone, for closing cor.of secs.10 and 15, mkd.on brass cap T 32 S R 7 W in N.half, C C S.9 S 16 in W.half, S 10 in NE.; and S 15 in SE.quadrants; from which A pinon pine, 9 ins.dia., bears N.30° 45'E.32.1ks. dist., mkd.T 32 S R 7 W S 10 B T A pinon pine, 9 ins.dia., bears S.39° 45'E.26 lks. dist., mkd.T 32 S R 7 W S 15 B T Note: I destroy all marks on the cor.of secs.9,10,15, and . 16, which pertain to secs.10 and 15. Land, rolling mountains; steep and rocky on W.33.00 chs. Soil, clay loam about 1 ft.deep, mixed with rock; sub- soil gravel and rock. Timber, cedar and pinon pine. Undergrowth, oak, mahogany and sagebrush. Good grass for grazing. Mountainous or heavily timbered land, or land covered with dense undergrwth 80.02 chs.

October 12, 1910.

October 3, 1910: At 2h 49m p.m.l.m.t., I set off 37°. 59'
N.on the lat.arc; 3° 52'S.on the decl.arc; and deter-
mine a meridian with the solar at the cor.of secs.32

Subdivision of T. 32 S., R. 7 W.-Continued.

Chains.

and 33 on S.bdy.of Tp., heretofore described.

Thence I run

N.0° 3'W.on a random line bet.secs.32 and 33,

40.00 Set temp. $\frac{1}{4}$ sec.cor.

82.50 Intersect N.and S.line 18 lks.W.of the cor.of secs.29
and 32, heretofore described.

Thence I run

S.0° 5'W.on a true line bet secs.32 and 33,

Over mountainous land; through scattering timber and
dense sagebrush. Asc.

4.89 The closing cor.of secs.28 and 33,

9.75 Cottonwood Creek, 3 lks.wide, $\frac{1}{2}$ in.deep, in bottom of
Cottonwood Canon, 30 ft.below cor., course W.

Asc.

10.50 Old road, bears E.and W.

11.50 Leave sagebrush and enter dense oak brush, bears E.and W.
Enter heavy cedar and pinon pine timber, bears E.and W.

19.50 Top of ridge, 200 ft.above canon, bears E.and W.

Desc.

28.00 Bottom of hollow, 100 ft.below ridge, course N.30°W.
Asc.

40.00 Set an iron post 3 ft.long, 1 in.in dia., 26 ins.in the
ground, for $\frac{1}{4}$ sec.cor., mkd.on brass cap $\frac{1}{4}$ S 33 in W.
half, and S 33 in E.half; from which
A cedar 5 ihs.dia., bears N.70°E. 29 lks.dist.

mkd. $\frac{1}{4}$ S 33 B T

A cedar, 5 ins.dia., bears S.85°W. 47 lks.dist.

mkd. $\frac{1}{4}$ S 32 B T

42.40 Top of ridge, 150 ft.above hollow, bears E.and W.Desc.

46.50 Volcanic dyke, 8 ft.wide, about 5.00 chs.long and ex-
tending 30 ft.out of the ground,bears N.80°E.and S.80°W.

48.50 Bottom of hollow, 100 ft.below ridge, course N.20°W.Asc.

57.00 Leave heavy and enter scattering timber,bears E.and W.

66.50 Top of spur, 250 ft.above hollow, bears E.and W.

Subdivision of T. 32 S., R. 7 W.-Continued.

Chains

76.50 Bottom of hollow, 75 ft. below spur, course N. 60° E.

Asc. spur, bears S.

82.50 The cor. of secs. 32 and 33. 150 ft. above hollow.

Land, mountainous, steep slopes and covered with volcanic rock. drains westerly.

Soil, clay loam about 1 ft deep, mixed with rock. Subsoil, clay and rock.

Timber, cedar and pinon pine.

Undergrowth, sage oak, and mahogany.

Good grass for grazing.

Mountainous or heavily timbered land, or land covered with dense undergrowth, 82.50 chs.

October 3, 1910.

Juniby Stewart

Instrumentman G.L.O.

General Description.

The eastern two tiers of sections in this township comprise Buckskin Valley and the slopes leading into said Valley. Buckskin Valley is about 500 ft. higher than Parowan valley; it is quite uneven and with the exception of isolated tracts it is too rocky to be of much value for farming land; that is it would be so difficult to plough that it would not be valuable for dry farming and there is not sufficient water to irrigate any considerable portion of it. The valley drains northward into Fremont Canon, and thence into Parowan Valley. The remainder of the township is very rough and steep, sloping and draining westward into Parowan valley. The sedimentary formation in this township is sandstone, but it is nearly all covered with volcanic rock from 50 to 500 ft. deep. There are no settlers in the township. Cotton wood creek, is a small stream averaging about 3

Subdivision of T.32 S., R.7 W. -Continued.

1ks.wide, and 3 ins.deep, rocky bottom in western part and clay bottom in eastern part; water is good but is muddy a good deal of the time. This stream crosses the southwest corner of the township. The water is used for irrigation in Parowan valley a few miles west.

There is a small stream of water from a spring in sec. 30 T.32 S., R.6 W., that crosses the line bet. secs. 19 and 24 and enters this township but it sinks in the gravel a few hundred feet northward.

Some specimens of iron ore were picked up in the township but no ledges or veins were seen.

With the exceptionⁿ of Parowan Valley (which is covered with sage brush) the township is pretty well covered with cedar and pinon pine timber with some scattering pine and balsam. Also with oak and mahogany brush.

The township is well adapted for grazing except that it has been grazed so much in recent years that the grass is pretty well tramped out. This township being out of the Forest Reserve it has becomea trail for sheep going to and from winter range to summer range.

John R Stewart
Instrumentman

Juniby Stewart
Instrumentmen G.I.O.

FINAL OATHS OF DEPUTY SURVEYOR AND HIS ASSISTANTS.**LIST OF NAMES.**

A list of the names of the individuals employed by
 United States Deputy Surveyor, to assist in running, measuring, and
 marking the lines and corners described in the foregoing field notes of the survey of
 owing the respective capacities in which they acted:

....., *Chainman.*
 For lists of names and final oaths of assistants see book "J", *Chainman.*
 52 S., R. 6 W., *Moundman.*
 *Moundman.*
 *Axman.*
 *Axman.*
 *Flagman.*

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted
 United States Deputy Surveyor, in surveying all
 those parts or portions of the

..... of the
 meridian, of which are represented
 the foregoing field notes as having been surveyed by him and under his direction; and that said survey
 has been in all respects, to the best of our knowledge and belief, well and faithfully surveyed, and the
 corner monuments established, according to the instructions furnished by the United States Surveyor
 general for

....., *Chainman.*
 *Chainman.*
 *Moundman.*
 *Moundman.*
 *Axman.*
 *Axman.*
 *Flagman.*

Subscribed and sworn to before me this }
 day of , 190 }

COOOCO
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COOOCO

FINAL OATH OF UNITED STATES DEPUTY SURVEYOR.

I, _____, United States Deputy Surveyor, do solemnly swear that, in pursuance of a contract received from _____, United States Surveyor General for _____, bearing date of the _____ day of _____, 190_____, I have well, faithfully, and truly, in my own proper person, and in strict conformity with the instructions furnished by the United States Surveyor General for _____, the Manual of Surveying Instructions, and the laws of the United States, surveyed all those parts or portions of _____.

For final oaths of transitmen see book "Z12" T. 31 S., R. 7 W.

_____ of the _____ meridian, in the _____ of _____, which are represented in the foregoing field notes as having been surveyed by me, and under my direction; and I do further solemnly swear that all the corners of said survey have been established and perpetuated in strict accordance with the Manual of Surveying Instructions, and the special written instructions of the United States Surveyor General for _____ and in the specific manner described in the field notes, and that the foregoing are the original field notes of such survey.

United States Deputy Surveyor.

Subscribed by said _____, and sworn to before me }
this _____ day of _____, 190 }



APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Salt Lake City, Utah, January 7, 1910

The foregoing field notes of the survey of the subdivisional lines of Township No. 32 S., R. 7 West of the Salt Lake Base and Meridian, Utah,

executed by John R. Stewart and Quinby Stewart
their special instructions dated August 6, 1910, having been
under his contract No. _____, dated _____, 1910, having been
critically examined, and the necessary corrections and explanations made, the said field notes, and the surveys they describe, are hereby approved.

Thomas C. Bell
United States Surveyor General.

I certify that the foregoing transcript of the field notes of the above-described surveys in _____, has been correctly copied from the original notes on file in this office.

United States Surveyor General.

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BOOK A-384

M.S.B.

FIELD NOTES

OF THE SURVEY OF THE

EAST BOUNDARY

and

RETRACEMENT NORTH AND SOUTH BOUNDARIES

of

Township No. 32 South, Range No. 6 West

Of the Salt Lake Base and Meridian,

State of Utah.

AS SURVEYED BY

U.S. Transitmen

John R. Stewart and Quinby Stewart, ~~Quinby Stewart Deputy Surveyor~~

Under Assignment Group No. 1, dated August 6, 1910., XXXX

Survey commenced October 12, 1910., 190

Survey completed October 19, 1910., XXXX

6-161

1-61-74

" 71- 6-05-37

Last 2-41-46

NAMES AND DUTIES OF ASSISTANTS.

Frank S. Allen Chainman

R. Bert Carter Chainman

Ruban W. Riley Moundman

Isaac R. Hayes Axman

William Carter Flagman

Maeser Valley Flagman

For preliminary affidavits see book "C" T. 33 S., R. 8 W.

Verne O. Nelson, Chainman.

Alton Ivie, Chainman.

Harvey W. Ellictt, Moundman.

Nicholas L. Sheffield, Axman.

6-151

Milo Nelson, Flagman;

For preliminary affidavits see book "C" T. 33 S., R. 8 W.

BOOK A-384

INDEX DIAGRAM.

Township 32 South, Range 5 West

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19	20	21	22	23	24	17
30	29	28	27	26	25	19
81	82	83	84	85	86	
	2					

Meanders Page

PRELIMINARY OATHS OF ASSISTANTS.

We, _____ and _____
 do solemnly swear that we will well and faithfully execute the duties of chainmen; that we will level the chain upon even and uneven ground, and plumb the tally pins, either by sticking or dropping the same; that we will report the true distances to all notable objects, and the true lengths of all lines that we assist in measuring, to the best of our skill and ability, and in accordance with instructions given us, in the survey o

, Chainman

, Chainman

Subscribed and sworn to before me this _____ }
 day of _____, 190 }



We, _____ and _____
 do solemnly swear that we will well and truly perform the duties of moundmen in the establishment of corners, according to the instructions given us, to the best of our skill and ability, in the survey o

, Moundman

, Moundman

Subscribed and sworn to before me this _____ }
 day of _____, 190 }



We, _____ and _____
 do solemnly swear that we will well and truly perform the duties of axmen in the establishment of corners and other duties, according to instructions given us, to the best of our skill and ability, in the survey o

, Axman

, Axman

Subscribed and sworn to before me this _____ }
 day of _____, 190 }



I, _____, do solemnly swear that I will well and truly perform the duties of flagman according to instructions given me, to the best of my skill and ability, in the survey of _____

, Flagman

Subscribed and sworn to before me this _____ }
 day of _____, 190 }



Retracement S.bdy.T.32 S., R.6 W.-

Survey commenced October 12, 1910, and executed with a w. and L.E. Gurley Explorer's transit, No. 957, with solar attachment. The horizontal limb is provided with two double verniers placed opposite to each other, reading to single minutes of arc; which is also the least count of the verniers of the latitude and declination arcs.

The instrument was examined, tested on the meridian at Salt Lake City, found correct, and was approved by the surveyor general, on August 6, 1910.

I examine the adjustments of the transit, and correct the level and collimation errors; then, to test the solar apparatus by comparing its indications resulting from solar observations made during p.m. and a.m. hours with a meridian established by Polaris observation, I proceed as follows:

At the cor. of secs. 5, 6, 31, and 32, on S.bdy. of Tp., latitude $37^{\circ}59'04''N.$, longitude $112^{\circ}32'07''W.$, I set off $37^{\circ}59'N.$, on the lat.arc; $7^{\circ}19'S.$, on the decl.arc; and at 3 h 47 m p.m. l.m.t., I determine a meridian with the solar, and mark a point thereof on a stone firmly set in the ground, 5.00 chs.N. of the cor.

At 6 h 10 m p.m., l.m.t., I observe Polaris at eastern elongation in accordance with the Manual, and mark a point in the line thus determined by a tack driven in a wooden plug set in the ground, 5.00 chs.N. of the cor.

October 12, 1910.

October 13, 1910: At 7 h 30 m a.m., l.m.t., I lay off the azimuth of Polaris $1^{\circ}29.4'$ to the west and mark a point in the meridian thus determined by cutting a small groove in the stone already set 5.00 chs.N. of the cor.; this mark falls 0.29 ins. east of the meridian determined by the solar.

2

Retracement S.bdy.T.32 S., R.6 W.-Continued.

Chains

At 7 h 48 m.a.m., l.m.t., I set off $37^{\circ}59'N.$, on the lat. arc; $7^{\circ}34'S.$, on the decl. arc; and mark the meridian determined with the solar, by a cross on the stone already set 5.00 chs.N. of the cor.; this mark falls .25 ins. east of the meridian established by Polaris observation.

The solar apparatus by p.m. and a.m. observations defines positions for meridians respectively about $0^{\circ}15'W.$ and $0^{\circ}15'E.$ of the meridian established by Polaris observation; therefore I conclude that the adjustments of the instrument are satisfactory.

The magnetic bearing of the meridian at 8 h 30 m.a.m., is $N.16^{\circ}00'W.$, the angle thus determined gives the mag. decl. $16^{\circ}00'E.$

5 G 31 & 62

The cor. of secs. 4, 5, 32, and 33, on S.bdy. of Tp. is a volcanic stone, $10 \times 12 \times 8$ ins., above ground, firmly set and mkd. and witnessed as described by the surveyor general. The old cor. is poorly mkd. therefore I destroy the old cor. and re-establish it in the same place as follows:

Set an iron post, 3 ft. long, 3 ins. in dia., 24 ins. in the ground, for cor. of secs. 5, 6, 31 and 32, mkd. on brass cap

T 32 S S 31 in NW.

R 6 W S 32 in NE.

R 6 W S 5 in SE.; and

T 33 S S 6 in SW. quadrants; and raise a mound of stone, 2 ft. base, $\frac{1}{2}$ ft. high, W. of cor.

Thence I run

East, on a retracement line bet. secs. 5 and 32.

Over mountainous land; through dense undergrowth. Asc.

23.44 Top of ridge, 300 ft. above cor. bears N. and S.
Dosc.

40.49 Fall 16 lks.S. of the 1 sec.cor. on S.bdy. Sec. 32, which is

Retracement S.Bdy.T.32 S , R.6 W.- C6ntinued.

- Chains. a granite stone 13 x 10 x 7 ins. above ground; firmly set, and mkd.and witnessed as described by the surveyor general. The stone is poorly mkd., therefore I destroy the old cor., and re-establish it in the same place as follows:
- Set an iron post 3 ft.long, 1 in.in dia., 26 ins.in the ground, for $\frac{1}{4}$ sec.cor., mkd.on brass cap $\frac{1}{4}$ S 32 in N.half, and S 5 in S.half; and raise a mound of stone 2 ft.base, $1\frac{1}{2}$ ft.high N.of cor.
- 69.00 Foot of descent, 500 ft.below ridge, bears N.and S. Enter Lower Bear Valley.
- 72.50 Old road bears N. 10° E. and S. 10° W.
- 80.70 Bear Creek 8 lks.wide, 4 ins.deep, course N. 10° E. Ascend.
- 81.84 Fall 36 lks.S.of the cor.of secs.4,5,32 and 33, which is a volcanic stone 13 x 9 x 7 ins.above ground, firmly set and mkd.and witnessed as described by the surveyor general. The old cor.is poorly marked;therefore I destroy the old cor., and re-establish it in the same place as follows:
- Set an iron post 3 ft.long, 3 ins.in dia., 24 ins.in the ground for cor.of secs.4,5,32, and 33, mkd.on brass cap
- T 32 S S 32 in NW.
- R 6 W S 33 in NE.
- R 6 W S 4 in SE.; and
- T 33 S S 5 in SW.quadrants; dig pits 18 x 18 x 12 ins.in each sec. $5\frac{1}{2}$ ft.dist.; and raise a mound pf earth 4 ft.base, 2 ft.high W.of cor.
- The course of this mile is therefore N. $89^{\circ} 45' E.$ 81.84 chs. Land, mountainous on W.69.00 chs.,long steep slopes draining into Bear Valley. E.12,84 chs.in Lower Bear Valley nearly level.
- Soil, on entire mile is rich, black loam about 2 ft.deep,

Retracement S.Bdy.T.32 S., R.6 W.- Continued.

Chains. mixed with a small amount of gravel. Subsoil gravel.

No timber.

Undergrowth, oak, sage, and buck brush.

Good grass for grazing.

Mountainous land, or land covered with dense under-growth 81.84 chs.

October 13, 1910.

John R Stewart
Instrumentman G.L.O.

Retracement North Bdy.T.32 S.R.6 W.

Survey commenced Oct. 13, 1910, and executed with a Young and Sons light mountain transit, No. 7382, with solar attachment. The horizontal limb is provided with two double verniers placed opposite to each other, reading to single minutes of arc, which is also the least count of the verniers of the latitude and declination arcs.

The instrument was examined, tested on the true meridian at Salt Lake City, found correct and was approved by the Surveyor-General for Utah, on Aug. 6, 1910.

Note: For test of instrument see Sub.T.32 S.R.6 W.

At the cor.of Tps.31 and 32 S., Rs.6 and 7 W., lat. $38^{\circ} 04' 17''$ N.; long. $112^{\circ} 33' 13''$ W., I set off $38^{\circ} 04' 17''$ N. on the lat.arc; $7^{\circ} 34' S.$ on the decl.arc; and at 7h 46 m.a.m.l.m.t., I determine a meridian with the solar.

From the cor.of Tps.31 and 32 S., Rs.6 & 7 W., hereto-

fore described I run N. $89^{\circ} 45' E.$ on a retracement line along N.bdy.of Tp., bet. secs.6 and 31.

Over rolling land; through dense sagebrush.

Road from Beaver to Panguitch, bears NW. and SE.

Fall 76 lks.N.of the $\frac{1}{4}$ sec.cor.bet.secs.6 and 31, which is a granite stone 11 x 10 x 6 ins.above ground, firmly set, and md. and witnessed as described by the surveyor-general. The stone is poorly md.; therefore I destroy the old cor., and re-establish it in the same place as follows:

Set an iron post 3 ft.long, 1 in.in dia., 26 ins.in the

29.00

40.44

Retracement N.bdy.T.32 S., R.6 W.-Continued.

Chains	ground, for $\frac{1}{4}$ sec.cor..mkd.on brass cap $\frac{1}{4}$ S 31 in N half. and S 6 in S half;dig pits,18x18x12 ins.E.and W.of post, 3 ft.dist.;and raise a mound of earth,3 $\frac{1}{2}$ ft.base,1 $\frac{1}{2}$ ft. high,W.of ths cor.
80.84	Fall 153 lks.N.o the cor.of secs.5,6,31, and 32,which is a granite stone,9x10x6 ins.,above ground,firmlly set, and mkd.and witnessed as described by the surveyor general, the stone is poorly mkd.therefore i destroy the old cor. and re-establish it in the same place as follows: Set an iron post,3 ft.long,3 ins.in dia.,24 ins.in the ground,for cor.of secs.5,6,31, and 32,mkd.on brass cap T 31 S S 31 in NW. R 6 w S 32 in NE. R 6 W S 5 in SE.;and T 32 S S 6 in SW.quadrants;dig pits,18x18x12 ins. in each sec.5 $\frac{1}{2}$ ft.dist.;and raise a mound of earth,4 ft. base,2 ft.high,W.of cor. The course of this line is therefore S.89°10'E.,80.84 chs Land,nearly level valley. Soil,sandy loam;2to 3 ft.deep,soft and fertile.Subsoil, gravelly. No timber. Undergrowth,sage brush and oak. Good grass for grazing. Land covered with dense undergrowth,80.85 chs.
	N89°45'E, on a retracement line betsecs.5 and 32. Over nearly level valley;through dense sage brush. Asc.gently.
22.75	Old road.bears N.and S.
33.75	Leave valley,bears N.and S. Asc. west slope of ridge.
40.49	Fall 13.0 lks.N.of the $\frac{1}{4}$ sec.cor.,betsecs.5 and 32.,which

Retracement N.bdy.T.32 S., R.6 W.-Continued.

chains	is a granite stone, 12x10x6 ins., above ground, set, loosely in the ground, and mkd. and witnessed as described by the surveyor general. The cor. is poorly mkd. and loosely set, therefore I destroy the old cor. and re-establish it in the same place as follows:
	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for $\frac{1}{4}$ sec.cor.. mkd. on brass cap $\frac{1}{4}$ S 32 in N half and S 5 in S half; and raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$ ft. high, N. of cor.
55.00	Top of spur, 100 ft. above valley, bears N.70°W. and S.70°E. Desc.
71.40	Bottom of hollow, 60 ft. below spur, course N.70°W. Asc.
80.17	Fall 153 lks. N. of the cor. of secs., secs. 4, 5, 32, and 33, which is a granite stone, 12x12x5 ins., above ground, firmly set, and mkd. and witnessed as described by the surveyor general, the cor. is poorly mkd. and therefore I destroy the old cor. and re-establish it in the same place as follows: Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground, for cor. of secs. 4, 5, 32, and 33, mkd. on brass cap T 31 S S 32 in NW. R 6 W S 33 in NE. R 6 W S 4 in SE.; and T 32 S S 5 in SW quadrants; and raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$ ft. high, w. of cor. The course of the west half of this lime is therefore S.88°25'E., 40.51 chs. and the east half is S.89°55'E., 39.68 chs. Land, On W.33:75 schs. over level valley land; slopes west and drains northwest. Soil, rich sandy loam mixed with coarse gravel, about 2 ft. deep, gravel subsoil. No timber Undergrowth, sage and oak. Good grass. E.46.44 schs. over rolling mountainous land; slopes and drains northwest.

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Retracement N.Bdy.T.32 S., R.6 W.- Continued.

Chains.

Soil, sandy clay loam about 18 ins. deep, covered with loose, volcanic rock. Gravel subsoil.

No timber. Undergrowth sagebrush.

A very little grass.

Fountainous land, or land covered with dense undergrowth

80.19 chs.

October 13, 1910: At this cor. I set off $7^{\circ} 38' S.$ on the decl.arc; and at 11h 46m a.m.l.m.t., observe the sun on the meridian; the resulting lat. is $38^{\circ} 04' N.$, which is the proper lat. nearly.

N. $89^{\circ} 45' E.$ on retrace ment line bet.secs.4 and 33,

Over mountainous land; through dense sage and oak brush.

Asc.

18.00 Top of spur, 90 ft.above cor., bears NW. and SE.

Desc.

20.90 Bottom of swale, 60 ft.below spur, course NW.

Asc.

38.00 Top of spur, 300 ft.above swale, bears N.and S.

Desc.

39.60 Fall 1 lk.N.of the $\frac{1}{2}$ sec.cor.bet.secs.4 and 33, which is a sandstone 13 x 10 x 7 ins.above ground, firmly set and marked and witnessed as described by the surveyor general. The stone is poorly marked, and I therefore destroy the old cor., and re-establish it in the same place, as follows:

Set an iron post 3 ft.long, 1 in.in dia., 26 ins.in the ground, for $\frac{1}{2}$ sec.cor., mkd.on brass cap $\frac{1}{2} S 33$ in N. half, and S 4 in S.half; and raise a mound of stone 2 ft.base, $1\frac{1}{2}$ ft.high N.of cor.

62.00 Bottom of hollow, 140 ft.below spur, course N. $20^{\circ} W.$

Asc.

65.00 Top of spur, 60 ft.above hollow, bears N. $10^{\circ} W.$ and S. 10°

Retracement N.Bdy.T.32 S., R.6 W. - Continued.

Chains.	
	E. Descend.
74.00	Enter pine timber, bears N.and S.
75.00	Leave timber, bears N.and S.
78.00	Bottom of hollow, 50 ft.below spur, course N.10°W.
	Asc.
79.78	Fall 13 lks.S.of the cor.of secs.3,4,33 and 34, which is a granite stone 11 x 8 x 5 ins.above ground, firmly set, and mkd.and witnessed as described by the surveyor gen- eral. The cor.is poorly marked; therefore I destroy it and re-establish it in the same place as follows:
	Set an iron post 3 ft.long, 3 ins.in dia., 24 ins.in the ground, for the cor.of secs.3,4,33, and 34, mkd.on brass cap
	T 31 S S 33 in NW.
	R 6 •W S 34 in NE.
	R 6 W S 3' in SE.; and
	T 32 S S 4 in SW.quadrants; and raise a mound of stone 2 ft.base,, 1½ ft.high W.of cor.
	Course of W.half is N.89°46'E.39.60 chs.; E.half N.89°33' E.40.18 chs.
	Land, mountainous and steep, covered with rock and boulders Soil, clay loam about 1 ft.deep, mixed with volcanic rock; subsoil, gravelly. Timber pine. Undergrowth sage and oak brush. Very little grass.
	Mountains land, or land covered with dense undergrowth
79.78 chs.	October 13, 1910.
	Oct.14, 1910: At 7h 46m a.m.l.m.t., I set off 38°04'N. on the lat.arc; 7°56'S.on the decl.arc; and determine a meridian with the solar at the cor.of secs.3,4,33, and 34. Thence I run N.89°45'E.on a retracement line betsecs.3 and 34.

Retracement H.bdy.T.32 S.,R.6 W.-Continued.

Chains	Ascending over mountainous land; through dense undergrowth.
2.00	Top of spur, 25 ft. above cor., bears N.10°W. and S.10°E. Desc.
5.40	Bottom of hollow, 50 ft. below spur, course N.25°W. Asc.
14.50	Top of spur, 50 ft. above hollow, bears N.10°W. and S.10°E. Desc.
20.00	Bottom of hollow, 25 ft. below spur, course N.20°W. Asc.
22.80	Top of ridge, 25 ft. above hollow, bears N40°E. and S.40°W. Desc.
40.00	Fall 17 lks. N. of $\frac{1}{4}$ sec. cor. bet. secs. 3 and 34, which is a sandstone, 10x10x7 ins. above ground, firmly set, and mkd. and witnessed as described by the surveyor general, the cor. is badly decayed therefore I destroy the old cor. and re-establish it in the same place as follows: Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor.. mkd. on brass cap $\frac{1}{4}$ S 34 in N half and S 3 in S half; and raise a mound of stone, 2' ft. base, $1\frac{1}{2}$ ft. high, N. of cor.
43.70	Bottom of hollow, 50 ft. below spur, course N.50°W. Asc.
69.00	Enter scattering pine timber, bears N. and S.
75.00	Top of knoll, 75 ft. high, on ridge, 200 ft. above hollow, ridge bears N.75°E. and S.75°W. Desc.
	Leave timber, bears N. 75°E. and S.75°W.
80.10	Fall 43 lks. N. of the cor. of secs. 2, 3, 34, and 35, which is a granite stone, 14x16x7 ins., above ground, firmly set, and mkd. and witnessed as described by the surveyor general. The cor. is poorly mkd. therefore I destroy the old cor. and re-establish it in the same place as follows: Set an iron post, 3 ft. long, 5 ins. in dia., 20 ins. in the ground, on bed rock, and surrounded by mound of earth and

Retracement N.bdy.T.32 S., R.6 W.-Continued.

Chains

stone, for cor. of secs. 2, 3, 34, and 35, mkd. on brass cap

T 31 S S 34 in NW.

R 6 W S 35 in NE.

R 6 W S 2 in SE.; and

T 32 S S 3 in SW. quadrants; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.

The course of the west half of this mile is therefore East 40.00 chs. the east half is S. 89° 53' E. 40.10 chs.

Land, mountainous and high slopes and drains northward.

Soil, sandy loam mixed and covered with volcanic rock, subsoil, clay and gravel.

Timber, pine.

Undergrowth, oak, sage, and mahogany.

Good grass in patches.

Mountainous or heavily timbered land, or land covered with dense undergrowth, 80.10 chs.

N. 89° 45' E. on a retracement line bet. secs. 2 and 35.

Over mountainous land; through dense sage, mahogany and oak brush.

Desc.

25.00 Foot of steep descent, 300 ft. below cor., bears NE and SW. Thence across meadow that is almost dried out.

40.75 Fall ~~23~~ lks. S. of the $\frac{1}{4}$ sec. cor. bet. secs. 2 and 35, which is a granite stone, 10x12x7 ins., above ground, firmly set, and mkd. and witnessed as described by the surveyor general.

I destroy the old cor. and reestablish it in the same place as follows:

Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor.. mkd. on brass cap $\frac{1}{4}$ S 35 in N half. and S 2 in S half; dig pits, 18x18x12 ins., E. and W. of post, 3 ft. dist; and raise a mound of earth, $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft.

Retracement North.bdy.T.32 S.,R.6 W.-Continued.

Chains	high,N.of cor.
49.70	Bottom of swale, course NE. Asc.gradually.
53.00	Leave meadow ,bears N.and S. Asc.more abruptly through dense sage and oak brush.
57.00	Top of spur,80 ft.above hollow,bears N.and S. Desc.
61.00	Bottom of hollow,50 ft.below spur,course N.37°E. Asc.
77.60	Top of spur,200 ft.above hollow,bears N.20°E.and S.20°W. Desc.
83,59	Fall 168 lks.S.of the cor.of secs.1,2,35, and 36,which is a granite stone,11x8x5 ins.,above ground ,loosely set, and mkd.and witnessed as described by the surveyor general The cor.is poorly mkd.and poorly set therefore I destroy the old cor.and re-establish it in the same place as follows: Set an iron post,3 ft.long,3 ins.in dia.,24 ins.in the ground,for cor.of secs.1,2,35, and 36,mkd.on brass cap T 31 S S 35 in NW. R 6 W S 36 in NE. R 6 W S 1 in SE.;and T 32 S S 2 in SW.quadrants;and raise a mound of stone,2 ft.base,1½ ft.high,W.of cor. Land,rolling mountains with long gradual slopes. soil,clay and sandy loam about 2 ft.deep,mixed with volcanic rock and covered with loose rock. No timber. Undergrowth,oak,sage ,and mahogany. Good grass in patches. Mountainous land,or land covered with dense undergrowth, 83.70 chs. The course of this mile is therefore N.89°17'E.,83.70 chs. October 14,1910:At the noon hour the sky is overcast and

Retracement N.bdy.T.32 S. R.6 W.-Continued.

	Chains	solar observations are impossible.
		N 89°45' E, on a retrace line bet. secs. 1 and 36.
		Over mountainous land; through dense sage and oak brush.
	Desc.	
21.40	Bottom of canon, 400 ft. below cor., course N.	
	Asc.	
40.33	Fall 32 lks. S. of the $\frac{1}{4}$ sec. cor. bet. secs. 1 and 36, which is a granite stone, 12x10x6 ins. above ground, firmly set, and mkd. and witnessed as described by the surveyor general. I destroy the old cor. and re-establish it in the same place as follows:	
	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor.. mkd. on brass cap $\frac{1}{4}$ S 36 in N half and S 1 in S half; and raise a mound of stone 2 ft. base, 1 $\frac{1}{2}$ ft. high, N. of cor.	
52.00	Top of divide ridge, 250 ft. above canon, bears N. and S.	
	Desc.	
67.00	Bottom of hollow, 60 ft. below ridge, course N. 70° E.	
	Asc.	
71.75	Top of spur, 40 ft. above hollow, bears N. 20° E. and S. 20° W.	
	Desc.	
76.00	Bottom of hollow, 60 ft. below spur, course N. 45° E.	
	Asc.	
79.00	Top of spur, 35 ft. above hollow, bears N.E. and SW.	
	Desc.	
80.75	Fall 63 lks. S. of the cor. of Tps. 31 and 32 S., Rs. 5 and 6 W., which is a granite stone, 12x10x9 ins., above ground, firmly set, and mkd. and witnessed as described by the surveyor general. I destroy the old cor. and re-establish it in the same place as follows:	
	Set an iron post, 3 ft. long, 3 ins. in dia., 20 ins. in the	

Retracement N.bdy.T.32 S., R.6 W.-Continued.

Chains

ground, on solid rock, and surrounded by mound of earth and stone, for cor. of Tps. 31 and 32 S., Rs. 5 and 6 W., mkd. on brass cap

T 31 S in N half.

T 32 S. in S half.

R 6 W S 36 in NW.

R 5 W S 31 in NE.

R 5 W S 6 in SE.; and

R 6 W S 1 in S W. quadrants; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, S. of cor.

The course of this mile is therefore N. $89^{\circ}18' E.$, 80.75

chs.

Land, rolling mountain top with long gradual slopes covered with dense sage and oak brush and volcanic rocks and boulders.

Soil, rich loam mixed with rock about 2 ft. deep, subsoil gravel and rock.

No timber.

Good grass for grazing.

Mountainous land, or land covered with dense undergrowth, 80.75 chs.

October 14, 1910.

Emilie Stewart

Instrumentman G.L.O.

East bdy.T.32 S.R.6 W.

Survey commenced October 17, 1910, and executed with a W. and L.E. Gurley light mountain Explorer's transit, No. 957, with solar attachment. The horizontal limb is provided

with a 4mm. wire and 15 mm. glass plate. The base is 10.00 ft.

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East bdy.T.32 S.,R.6 W. . . .

Chains

with two double verniers placed opposite to each other,
reading to single minutes of arc; which is also the
least count of the latitude and declination arcs.

The instrument was examined, tested on the meridian at Salt Lake City, found correct, and was approved by the surveyor general for Utah, on August 6, 1910.

I examine the adjustments of the instrument and correct the level and collimation errors; then, to test the solar apparatus by comparing its indications resulting from solar observations made during p.m. and a.m. hours with a meridian established by Polaris observation; I proceed as follows:

At the $\frac{1}{4}$ sec.cor.bet.secssecs.25 and 30, on E.bdy.of Tp. latitude $38^{\circ}00'22''$ N., longitude $112^{\circ}26'39''$ W., I set off $38^{\circ}00'$ N., on the lat.arc; $9^{\circ}40'$ S., on the decl.arc; and at 3 h 46 m p.m., l.m.t., I determine a meridian with the solar and mark a point thereof on a stone firmly set in the ground, 5.00 chs.N.of the cor.;

A 5 h 51. m p.m., l.m.t., I observe Polaris at eastern elongation, in accordance with the Manual, and mark a point in the line thus determined by a tack driven in a wooden plug set in the ground, 5.00 chs.N.of the cor.

October 17, 1910.

October 18, 1910: At 7 h 30 m a.m., l.m.t., I lay off the azimuth of Polaris $1^{\circ}29.4'$ to the west, and mark a point in the meridian thus determined by cutting a small groove in the stone already set 5.00 chs.N.of the cor.; this mark falls 0.30 ins.east of the meridian established by the solar.

At 7 h 45 m a.m., l.m.t., I set off $38^{\circ}00'$ N., on the lat.arc; $9^{\circ}25'$ S., on the decl.arc; and mark the meridian determined with the solar, by a cross on the stone already set 5.00 chs.N.of the cor.; this mark falls 0.33 ins.east of the

E.bdy.T.32 S.,R.6 W.-Continued.

Chains

meridian established by Polaris observation;

The solar apparatus by p.m. and a.m. observations defines positions for meridians respectively about $0^{\circ}16'$ west and $0^{\circ}17'$ east of the meridian established by Polaris observations; therefore I conclude that the adjustments of the instrument are satisfactory.

The magnetic bearing of the meridian at 8 h 30 m a.m., $N.16^{\circ}00'W.$; the angle thus determined gives the mag.decl. $16^{\circ}00'E.$

The $\frac{1}{4}$ sec.cor., bet.secs.25 and 30, on E.bdy.of Tp., is a granite stone, $6 \times 10 \times 6$ ins., above ground, loosely set and mkd. and witnessed as described by the surveyor general. I destroy the old cor. and re-establish it in the same place as follows:

Set an iron post, 3 ft.long, 1 in.in dia., 26 ins.in the ground, for $\frac{1}{4}$ sec.cor..mkd.on brass cap $\frac{1}{4}$ S 25 in W half. and S 30 on E half; from which

A cedar, 6. ins.dia., bears $S.88^{\circ}E.$, 20 lks.

dist..mkd. $\frac{1}{4}$ S 30 B.T.

A pinon pine, 10 ins.dia. bears $S.62^{\circ}W.$, 30 lks.

dist.. dist..mkd. $\frac{1}{4}$ S 25 B.T.

Thence I run

North, on a random line along East bdy.of Tp., setting temp. $\frac{1}{4}$ sec.and sec.cors.at intervals of 40.00 chs.and at 201.40 chs.Fall 18 lks.East of the cor.of secs.7,12,13, and 18, which is heretofore described.The falling answers to a correction of 3'east per mile commencing at this cor.

October 18, 1910.

October 19, 1910:At 7 h 45 ma .m. l.m.t., I set off $38^{\circ}03'$

East bdy.T.32 S.,R.6 W.-Continued.

Chains

N.,o n the lat.arc;9°47'S.,on the decl.arc;and determine a meridian with the solar at the cor.of secs.7,12,13, and 18.

Thence I run

S.0°3'E.,on a true line betsecs.13 and 18.

Over mountainous land;through dense scattering oak and buck brush and sage brush.

Desc.

10.25 Bottom of hollow,50 ft.below cor.,course SE.

Asc.

22.00 Top of spur,50 ft.above hollow,bears E.and W.

Desc.

30.00 Enter scattering cedar and pinon pine timber,bears E. and W.

Enter scattering mahogany brush,bears E.and W.

41.00 Bottom of hollow,100 ft .below spur,course NE.

Asc.

41.40 Set an iron post,3 ft.long,1 in.in dia.,26 ins.in the ground,for $\frac{1}{4}$ sec.cor.mkd.on brass cap $\frac{1}{4}$ S 13 in W half. and S 18 in E half;and raise a mound of earth and stone, 2 ft.base,1 $\frac{1}{2}$ ft.high,W.of.cor.

55.00 Leave sage and oak brush and enter dense mahogany,bears E.and W.

71.00 Top of ridge,300 ft.above hollow.,bears E.and SW.

Leave mahogany,bears E.and SW.

Enter heavy cedar and pinon pine timber,bears E.and SW.

Desc.abruptly over ledges.

81.40 Set an iron post,3 ft.long,3 ins.in dia.,20 ins.in the ground,on bed rock, and surrounded by mound of earth and stone,for cor.of secs.13,18,19, and 24,mkd.on brass cap

T 32 S in N.half.

R 6 W S 13 in NW.

R 5 W S 18 in NE.

S 19 in SE.;and

S 24 in SW.quadrants;from which

East bdy.T.32 S.,R.6 W.-Continued.

Chains	<p>A cedar, 14 ins. dia., bears N.30°E., 40 lks. dist..mkd.T 32 S R 5 W S 18 B T.</p> <p>A pinon pine, 6 ins. dia., bears S.11°E., 32 lks. dist..mkd.T 32 S R 5 W S 19 B T.</p> <p>A granite boulder 10x10x8 ft.bears S.60°W., 14 lks.dist., mkd.+ B O on NE face.</p> <p>A cedar, 8 ins. dia., bears N.38°W., 87 lks. dist..mkd.T 32 S R 6 W S 13 B T.</p> <p>Land, rough mountains with steep rocky slopes and Soil, black loam mixed with gravel and rock about 18 ins. deep, subsoil gravel and rock.</p> <p>Timber, cedar and pinon pine.</p> <p>Undergrowth, oak, sage, buck, and mahogany.</p> <p>Good grass for grazing.</p> <p>Mountainous or heavily timbered land, or land covered with dense undergrowth, 81.40 chs.</p> <p>October 19, 1910: At this cor. I set off 9°51'S., on the decl.arc; and at 11 h 45 m a.m., l.m.t., I observe the sun on the meridian, the resulting lat. is 38°02'N., which is the proper lat.nearly.</p> <hr/> <p>S, 0°3'E., on a true line bet.secs.19 and 24.</p> <p>Over mountainous land; through heavy cedar and pinon pine timber.</p> <p>Desc.over a series of low ledges.</p> <p>13.30 Bottom of conglomerate ledge, 100 ft. high, bears NE and SW</p> <p>25.00 Foot of steep descent, bears NE and SW, Leave ledges, bears NE and SW.</p> <p>40.00 Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for $\frac{1}{2}$ sec.cor..mkd.on brass cap $\frac{1}{4}$ S 24 in W half. and S 19 in E half; from which</p> <p>A mahogany, 4 ins. dia., bears S.65°E., 20 lks. dist..mkd.$\frac{1}{4}$ S 19 B T.</p> <p>A mahogany, 5 ins. dia., bears N.80°W., 20 lks.</p>
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E.bdy.T.32 S.,R.6 W.-Continued.

Chains	
	dist..mkd. $\frac{1}{2}$ S '24 B T.
40.50	Bottom of hollow,300 ft.below sec.cor.,course SE. Asc.
45.00	Top of spur,50 ft.above hollow,bears N.70°W.and S.70°E. Desc.
50.00	Bottom of hollow,50 ft.below spur,course S.80°E. Asc.
55.25	Top of ridge,50 ft.above hollow,bears E.and W. Desc.
58.00	Leave timber,bears E.and W. Enter dense sage brush,bears E.and W.
59.00	White sandstone ledge,30 ft.high,bears E.and W.
60.00	Bottom of hollow,20 ft.below foot of ledge,course S.60°E. Enter scattering timber,bears NW and SE. Asc.
80.00	Set an iron post,3 ft.long,3 ins.in dia.,20 ins.in the ground,on bed rock,and surrounded by mound of earth and stone,for cor.of secs.,19,24,25, and 30,mkd.on brass cap T 32 S in N half. R 6 W S 24 in NW. R 5 W S 19 in NE. S 30 in SE.;and S 25 in SW.quadrants;from which A pinon pine,5 ins.dia.,bears N.77°E.,60 lks. dist..mkd.T 32 S R 5 W S 19 B T. A pinon pine,10 ins.dia.,bears S.66°30'E.,65 lks dist..mkd.T 32 S R 5 W S 30 B T. A pinon pine,10 ins.dia.,bears S.20°30'W.,103 lks. dist..mkd.T 32 S R 6 W S 25 B T. A pinon pine,8 ins.dia.,bears N.78°20'W.,52 lks. dist..mkd.T 32 S R 6 W S 24 B T. Land, on N.25.00 chs.very steep and rugged and covered

East bdy. T.32 S., R.6 W.-Continued.

Chains

with loose rock and ledges. Soil, loam mixed with a large amount of rock and on bed rock at a depth of about 16 ins. Timber, cedar and pinon pine . Undergrowth, oak, mahogany and sage brush. A very little grass. On S.55.00 chs. the land is mountainous but more rolling slopes are not so steep. Soil, is sandy loam about 2 ft. deep. Subsoil sandstone. Timber, cedar and pinon pine.Undergrowth, sage brush and mahogany. Good grass for grazing.

Mountainous or heavily timbered land, or land covered with dense undergrowth, 80.00 chs.

South, on a true line bet. secs. 25 and 30.

Over mountainous land; through heavy cedar and pinon pine timber and scattering sage and mahogany brush.

Asc.

5.50 Top of spur, 50 ft. above cor., bears NW and SE.

Desc.

32.50 Bottom of hollow, 100 ft. below spur, course SE.

Asc.

.40.00 The $\frac{1}{2}$ sec. cor. bet. secs. 25 and 30.

Land, mountainous .

Soil, sandy loam; 2nd rate.

Timber, cedar and pinon pine.

Undergrowth, sage and mahogany.

Good grass for grazing.

Mountainous or heavily timbered land, 40.00 chs.

S.

NE. SE. October 19, 1910.

80.15

SW. NW. 80.16. 80.00.

John R. Stewart

Instrumentman G.L.O.

S. C. NE.

SW.

NW.

SE.

Boundaries of T.32 S., R.6 W.

Latitudes, Departures, and Closing Errors.

Line Designated	Course	Dist- ance chs.	Latitudes N. chs.	S. chs.	Departures E. chs.	Departures W. chs.
W.bdy.T.32 S.,R.6 W.	N.0°2'W..	80.00	80.00	.	.	.05.
W.bdy.T.32 S.,R.6 W.	North	40.70	40.70			
W.bdy.T.32 S.,R.6 W.	N.0°12'W.	40.31	40.31			.14
W.bdy.T.32 S.,R.6 W.	North	79.80	79.80			
W.bdy.T.32 S.,R.6 W.	North	39.90	39.90			
W.bdy.T.32 S.,R.6 W.	W.W.1°00'E.	41.68	41.67			.73
W.bdy.T.32 S.,R.6 W.	W.W.0°02'E.	40.27	40.27			.02
W.bdy.T.32 S.,R.6 W.	W.W.0°15'E.	39.95	39.95			.17
W.bdy.T.32 S.,R.6 W.	S.89°10'E.	80.84			1.17	80.84
W.bdy.T.32 S.,R.6 W.	S.88°25'E.	40.51			1.12	40.49
W.bdy.T.32 S.,R.6 W.	S.89°55'E.	39.68			.06	39.68
W.bdy.T.32 S.,R.6 W.	S.89°46'E.	39.60		.16		39.60
W.bdy.T.32 S.,R.6 W.	S.89°33'E.	40.18		.32		40.18
W.bdy.T.32 S.,R.6 W.	East	40.00				40.00
W.bdy.T.32 S.,R.6 W.	S.89°53'E.	40.10			.08	40.10
E.bdy.sec.3 Sub.						
T.32 S.,R.6 W.	S.1°32'E.	77.90			77.87	2.08
E.bdy.sec.10, Sub.						
T.32 S.,R.6 W.	South	79.32			79.32	
S.bdy.sec.10 Sub.						
T.32 S.,R.6 W.	S.89°35'W.	38.56			.28	38.56
S.bdy.sec.10, Sub.						
T.32 S.,R.6 W.	West	40.02				40.02
E.bdy.sec.16, Sub.						
T.32 S.R.6 W.	South	79.92			79.92	
E.bdy.sec.21 Sub.						
T.32 S.,R.6 W.	S.0°34'E.	80.52			80.52	.80
S.bdy.sec.21, Sub.						
T.32 S.,R.6 W.	N.89°25'W.	82.19		.84		82.19
E.bdy.sec.29 Sub.						
T.32 S.,R.6 W.	South	80.00			80.00	
E.bdy.sec.32 Sub.						
T.32 S.,R.6 W.	S.0°07'W.	81.12			81.12	.16
S.bdy.T.32 S.,R.6 W.	S.89°55'W.	81.84			.12	81.84
W.bdy.sec.32 Sub.						
T.32 S.,R.6 W.	N.0°25'W.	79.92	79.92			.58
S.bdy.sec.30 Sub.						
T.32 S.,R.6 W.	S.89°06'W.	81.08			1.27	81.08
Convergency						.28
Totals					483.84	482.85
Error in Lat.					482.85	324.62
Error in Dep.					99	35

Boundaries of T.32 S., R.6 W.-Continued.

Chains

General Description.

For General Description see notes of Subdivision of T.
32 S R 6 W.

October 19, 1910.

John R Stewart
Dwight Stewart

Instrumentmen G.I.O.

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Page

TRANSITMAN

FINAL OATHS OF DEPUTY SURVEYOR AND HIS ASSISTANTS.

LIST OF NAMES.

A list of the names of the individuals employed by Quinby Stewart

Instrumentman G.L.O., ~~X~~^{XXXXX} States ~~X~~^{XXXXX} Surveyor, to assist in running, measuring, and marking the lines and corners described in the foregoing field notes of the survey of Retracement N., S., and E., bdy. T. 33 S., R. 8 W.; Retracement N. bdy. T. 33 S., R. 7 W.; N. bdy. T. 32 S., R. 7 W.; Retracement N. bdy. T. 32 S., R. 7 W.; and Retracement N. bdy. T. 32 S., R. 6 W.; showing the respective capacities in which they acted:

Verne O. Nelson, Chairman.

Alton Ivie, Chairman.

Harvey W. Elliott, Moundman.

W. H. Smithfield, Mourndman.

Nicholas L. Sheffield Axman.

Axman.

Milo Nelson.....Flagman.

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted Quinby Stewart

Instrumentman G. L. O., United States Deputy Surveyor, in surveying all those parts or portions of the Retracement N., S., and E., bdy. T. 33 S., R. 8 W.; Retracement N. bdy. T. 33 S., R. 7 W.; N. bdy. T. 32 S., R. 7 W.; Retracement N. bdy. T. 32 S., R. 7 W.; and Retracement N. bdy. T. 32 S., R. 6 W.

of the ...Salt.

Lake Base and meridian, State of Utah, which are represented in the foregoing field notes as having been surveyed by him and under his direction; and that said survey has been in all respects, to the best of our knowledge and belief, well and faithfully surveyed, and the corner monuments established, according to the instructions furnished by the United States Surveyor General for Utah.

Verne Ondson, Chairman.

Altiss, Ivie Chairman.

Harvey W. Elliott, Moundman.

Moundman.
Axman.
Flagman.
Flagman.

Subscribed and sworn to before me this 22nd

day of October 1910. xxx

SEAL

Instrumentman G.L.O.

Günther Stewart

FINAL OATH OF UNITED STATES DEPUTY SURVEYOR.

I, _____, United States Deputy Surveyor, do solemnly swear that, in pursuance of a contract received from _____, United States Surveyor General for _____, bearing date of the _____ day of _____, 19_____, I have well, faithfully, and truly, in my own proper person, and in strict conformity with the instructions furnished by the United States Surveyor General for _____, the Manual of Surveying Instructions, and the laws of the United States, surveyed all those parts or portions of _____.

For final oath of Quinby Stewart Transitman see book "Z" ¹¹
T.31 S.R.9 W.

of the _____ meridian, in the _____ of _____, which are represented in the foregoing field notes as having been surveyed by me, and under my direction; and I do further solemnly swear that all the corners of said survey have been established and perpetuated in strict accordance with the Manual of Surveying Instructions, and the special written instructions of the United States Surveyor General for _____, and in the specific manner described in the field notes, and that the foregoing are the original field notes of such survey.

United States Deputy Surveyor.

Subscribed by said _____, and sworn to before me }
this _____ day of _____, 19_____ }



APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

, 19

The foregoing field notes of the survey of _____

executed by _____
under his contract No. _____, dated _____, 19_____, having been critically examined, and the necessary corrections and explanations made, the said field notes, and the surveys they describe, are hereby approved.

United States Surveyor General.

I certify that the foregoing transcript of the field notes of the above-described surveys in _____, has been correctly copied from the original notes on file in this office.

United States Surveyor General.

TRANSITMAN

FINAL OATHS OF ~~DEPUTY SURVEYOR~~ AND HIS ASSISTANTS.

LIST OF NAMES.

A list of the names of the individuals employed by John R. Stewart
 Instrumentman G.L.O., United States Deputy Surveyor, to assist in running, measuring, and marking the lines and corners described in the foregoing field notes of the survey of E.bdy.T.33 S., R.8 W.; Retracement S.E. and N.bdys.T.33 S., R.7 W.; E.bdy.T.33 S.R.7 W.; Retracement E. and W.bdys.of T.32 S., R.7 W.; Retracement S.bdy.T.32 S., R.7 W.; and E.bdy.T.32 S., R.6 W.; showing the respective capacities in which they acted:

Frank S. Allen, Chainman.
 R. Bert Carter, Chainman.
 Ruban W. Riley, Moundman.
 Maeser Valley, Moundman.
 Isaac R. Hayes, Axman.
 William Carter, Flagman, XXXXX
 Maeser Valley, flagman, XXXXXX

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted John R. Stewart

Instrumentman G.L.O., ~~United States Deputy Surveyor~~, in surveying all those parts or portions of the E.bdy.T.33 S., R.8 W.; Retracement S.E. and N.bdys.T.33 S., R.7 W.; E.bdy.T.33 S., R.7 W.; Retracement E. and W.bdys.of T.32 S., R.7 W.; Retracement South bdy.T.32 S., R.6 W.; E.bdy.T.32 S., R.6 W. of the Salt

Lake Base and meridian, State of Utah, which are represented in the foregoing field notes as having been surveyed by him and under his direction; and that said survey has been in all respects, to the best of our knowledge and belief, well and faithfully surveyed, and the corner monuments established, according to the instructions furnished by the United States Surveyor General for Utah

Frank S. Allen, Chainman.
 R. Bert Carter, Chainman.
 Ruban W. Riley, Moundman.
 Isaac R. Hayes, Axman.
 William Carter, Period of Service Sept.11, 1910 to Oct.7, 1910, Flagman
 Maeser Valley, Sept.2, 1910 to Sept.8, 1910, Flagman.

Subscribed and sworn to before me this 22nd day of October 1910. }



John R. Stewart

Instrumentman G.L.O.

TRANSITMAN.

FINAL OATH OF UNITED STATES DEPUTY SURVEYOR.

I, John R. Stewart, Transitman, United States Deputy Surveyor, do solemnly swear that, in pursuance of a contract received from Thomas Hull, United States Surveyor General for Utah, bearing date of the 6th day of August, 1910, I have well, faithfully, and truly, in my own proper person, and in strict conformity with the instructions furnished by the United States Surveyor General for Utah, the Manual of Surveying Instructions, and the laws of the United States, surveyed all those parts or portions of E. bdy. T. 33 S., R. 8 W.; survey of E. and retracement of N., S., and E. bdr. T. 33 S., R. 7 W.; retracement E. and W. bdr. T. 32 S., R. 7 W.; survey of E. and ret. S. bdr. T. 32 S., R. 6 W. of the Salt Lake Base and Meridian, in the State of Utah, which are represented in the foregoing field notes as having been surveyed by me, and under my direction; and I do further solemnly swear that all the corners of said survey have been established and perpetuated in strict accordance with the Manual of Surveying Instructions, and the special written instructions of the United States Surveyor General for Utah, and in the specific manner described in the field notes, and that the foregoing are the original field notes of such survey.

John R. Stewart
United States Deputy Surveyor
United States Transitman.

Subscribed by said John R. Stewart, and sworn to before me,
this 5th day of April, 1912, A.D.

Thomas Hull
U.S. Surveyor-General
for Utah.

APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Salt Lake City, Utah, January 7, 1914.

The foregoing field notes of the survey of the east, and retracement of the north and south boundaries of Township No. 32 South, Range No. 6, West of the Salt Lake Base and Meridian, Utah,

executed by John R. Stewart and Quinby Stewart, their special instructions under his contract No. A, dated August 6, 1910, A.D., having been critically examined, and the necessary corrections and explanations made, the said field notes, and the surveys they describe, are hereby approved.

Thomas Hull
United States Surveyor General

I certify that the foregoing transcript of the field notes of the above-described surveys in _____, has been correctly copied from the original notes on file in this office.

United States Surveyor General.

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4-670.

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MAR 3 1911

J.

BOOK A-384

FIELD NOTES

OF THE SURVEY OF THE

SUBDIVISION

and

RETRACEMENT SUBDIVISION

of

Township No. 32 South, Range No. 6 West

Of the Salt Lake Base and Meridian,
State of Utah

AS SURVEYED BY

John R. Stewart and Quinby Stewart U.S. Transitmen
~~and Dumpy Surveyor~~Assignment Group
~~Under his Contract No.~~ 1 dated August 6, 1910., XXXX

Survey commenced October 9, 1910., XXXX

Survey completed October 22, 1910., XXXX

6-161

Str. Lft - 20-44-845
Lft - 11 - 11 - 14.24

NAMES AND DUTIES OF ASSISTANTS.

Frank S. Allen

Chainman

R. Bert Carter

Chainman

Ruban W. Riley

Moundman

Isaac R. Hayes

Axman

William Carter

Flagman

Verne O. Nelson,

Chairman..

Alton Ivie,

Chairman..

Harvey W. Elliott,

Moundman.

Moundman.

Nicholas L. Sheffield, Axman..

Milo Nelson,

Flagman.

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For preliminary affidavits see book "D" T. 33 S. R. 8 W..

BOOK A-384

INDEX DIAGRAM.

Township 32 South, Range 6 West

6	2	5	59	4	45	8	25	2	1
		30		57		42			
7	3	8	55	9	44	10	24	11	12
		27		28		22			32
18	5	17	53	16	19	15		14	33
		52		49					40
10	6	20	48	21	17	22		23	35
			51						24
8		47		16			37		38
80	9	29	14	28		27		26	25
10		46							
81	12	32	12	38		34		35	30

Meanders Page

PRELIMINARY OATHS OF ASSISTANTS.

We,

and

do solemnly swear that we will well and faithfully execute the duties of chainmen; that we will level the chain upon even and uneven ground, and plumb the tally pins, either by sticking or dropping the same; that we will report the true distances to all notable objects, and the true lengths of all lines that we assist in measuring, to the best of our skill and ability, and in accordance with instructions given us, in the survey of

, Chairman

, Chairman

Subscribed and sworn to before me this }
day of , 190 }



We, and

do solemnly swear that we will well and truly perform the duties of moundmen in the establishment of corners, according to the instructions given us, to the best of our skill and ability, in the survey of

, Moundman

, Moundman

Subscribed and sworn to before me this }
day of , 190 }



We, and

do solemnly swear that we will well and truly perform the duties of axmen in the establishment of corner and other duties, according to instructions given us, to the best of our skill and ability, in the survey of

, Axman

, Axman

Subscribed and sworn to before me this }
day of , 190 }



I, do solemnly swear that I will well and truly perform the duties of flagman according to instructions given me, to the best of my skill and ability, in the survey of

, Flagman

Subscribed and sworn to before me this }
day of , 190 }



BOOK A-384

INDEX DIAGRAM.

Township....., Range.....

6	6	6	8	2	1
7	6	9	10	11	12
16	17	10	15	14	13
19	20	21	22	23	24
20	29	28	27	26	25
61	82	83	34	85	86

Meanders Page.....

74
PRELIMINARY OATHS OF ASSISTANTS.

WE,

and

do solemnly swear that we will well and faithfully execute the duties of chainmen; that we will level the chain upon even and uneven ground, and plumb the tally pins, either by sticking or dropping the same; that we will report the true distances to all notable objects, and the true lengths of all lines that we assist in measuring, to the best of our skill and ability, and in accordance with instructions given us, in the survey

, Chainma

, Chainma

Subscribed and sworn to before me this

day of , 190 }



WE,

and

do solemnly swear that we will well and truly perform the duties of moundmen in the establishment of corners, according to the instructions given us, to the best of our skill and ability, in the survey

, Moundma

, Moundma

Subscribed and sworn to before me this

day of , 190 }



WE,

and

do solemnly swear that we will well and truly perform the duties of axmen in the establishment of corners and other duties, according to instructions given us, to the best of our skill and ability, in the survey

, Axma

, Axma

Subscribed and sworn to before me this

day of , 190 }



I, do solemnly swear that I will well and truly perform the duties of flagman according to instructions given me, to the best of my skill and ability, in the survey of

, Flagma

Subscribed and sworn to before me this

day of , 190 }



Retracement Sub.T.32 S.,R.6 W.-

Survey commenced October 9, 1910, and executed with a W. and L.E. Gurley Explorer's transit No. 957, with solar attachment. The horizontal limb is provided with two double verniers placed opposite to each other, reading to single minutes of arc; which is also the least count of the latitude and declination arcs.

The instrument was examined, tested on the meridian at Salt Lake City, found correct, and was approved by the surveyor general for Utah, on August 6, 1910.

I examine the adjustments of the instrument and correct the level and collimation errors; then, to test the solar apparatus by comparing its indications resulting from solar observations made during a.m. and p.m. hours, with a meridian established by Polaris observation; I proceed as follows:

At the cor. of secs. 5, 6, 31, and 32, on N.bdy. of Tp., latitude $38^{\circ}04'17''$ N., longitude $112^{\circ}32'07''$ W., I set off $38^{\circ}04'$ N., on the lat.arc; $5^{\circ}11'15''$ S., on the decl.arc; and at 3 h 48 m p.m., l.m.t., I determine a meridian with the solar, and mark a point thereof on a stone firmly set in the ground 5.00 chs.N. of the cor.

At 6 h 22 m p.m., l.m.t., I observe Polaris at eastern elongation in accordance with the Manual² and mark a point in the line thus determined by a tack driven in a wooden plug set in the ground, 5.00 chs.N. of the cor.

October 9, 1910.

October 10, 1910° At 3 h 47 m p.m., l.m.t., I lay off the azimuth of Polaris $1^{\circ}29.4'$ to the west and mark the meridian thus determined, by cutting a small groove in the stone already set, 5000 chs.N. of the cor.; this mark falls 0.34 ins. east of the meridian determined by the solar.

Retracement Subdivision of T.32 S., R.6 W. -Continued.

Chains

At 3 h 47 m P.M., l.m.t., I set off $38^{\circ}04'N.$, on the lat. arc; $6^{\circ}17'S.$, on the decl. arc; and determine a meridian with the solar and mark a point thereof by a cross on the stone already set 5.00 chs. N. of the cor.; this mark falls 0.27 ins. east of the meridian established by Polaris observation.

The solar apparatus by p.m. and M.M. observations defines positions for meridians respectively about $0^{\circ}18'W.$ and $0^{\circ}14'E.$ of the meridian established by Polaris observation; therefore I conclude that the adjustments of the instrument are satisfactory.

The magnetic bearing of the meridian at 4 h 30 m a.m., is $N.16^{\circ}01'W.$, the angle thus determined gives the mag. decl. $16^{\circ}01'E.$

Note: Before commencing the regular subdivision of this township I deem it necessary to retrace the old lines adjoining my work. From the cor. of secs. 5, 6, 31 & 32 on the N. Bay. of Tp., heretofore described, I run $S.0^{\circ}39'E.$ on a retracement line bet. secs. 5 and 6. Over nearly level valley; through dense sage brush.

- 37.15 Fall 199 lks. W. of the $\frac{1}{4}$ sec. cor., met. secs. 5 and 6, which is a sand stone, 9, x 12 x 8 ins. above ground, firmly set, and mkd. and witnessed as described by the surveyor general. The cor. is badly decayed therefore I destroy the old cor. and re-establish it in the same place as follows:
Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor.. mkd. on brass cap $\frac{1}{4} S 6$ in W half. and $S 5$ in E half.; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.
- 48.60 Old road, bears $N.60^{\circ}E.$ and $S.60^{\circ}W.$
- 61.90 Same road, bears NW and SE.
- 64.50 Wash, 30 lks. wide, 4 ft. deep, course W.

Retracement Subdivision of T.32 S., R.6 W. Continued.

Chains

- 65.70 Road from Beaver to Pangunich, bears N.70°W. and S.70°E.
- 77.17 Fall 156 lks.W. of the cor. of secs. 5, 6, 7, and 8, which is a granite stone, 16x8x6 ins., above ground, firmly set, and mkd. and witnessed as described by the surveyor general. The cor. is poorly mkd. therefore I destroy the old cor. and re-established it in the same place as follows:
Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground, for cor. of secs. 5, 6, 7, and 8, mkd. on brass cap

T 32 S S 6 in NW.

R 6 W S 5 in NE.

S 8 in SE.; and

S 7 in SW. quadrants; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.

The course of this mile is therefore : north half-S.3°43' E., 37.20 chs.; south half-S.0°2' E., 40.02 chs.

Land, nearly level land in Buckskin Valley.

Soil, rich sandy loam about 2 ft. deep, there are numerous small patches of rocky ground which would interfere with the cultivation of this land; otherwise it would be good dry farming ground.

No timber.

Undergrowth, sage brush.

A very little grass.

Land covered with dense undergrowth, 77.22 chs.

October 10, 1910.

October 11, 1910: At 7 h 47 m a.m., l.m.t., I set off 38°03' N., on the lat. arc; 6°49'S., on the decl. arc; and determine a meridian with the solar, at the cor. of secs. 5, 6, 7, and 8.

Thence, I run

South, on a retrace ment line bet. secs. 7 and 8.

Retracement Sub.T.32 S., R.6 W.-Continued.

Chains	
	Over nearly level land in Buckskin Valley; through dense sage brush.
32.60	Old road, bears NE and SW.
40.37	Fall 15 lks.E.of $\frac{1}{2}$ sec.cor.betsecs.7 and 8, which is a granite stone, 10x8x6 ins., above ground, loosely set, in the ground, and mkd.and witnessed as described by the surveyor general. I destroy the old cor.and re-establish it in the same place as follows: Set an iron post, 3 ft.long, 1 in.in dia., 26 ins.in the ground, for $\frac{1}{2}$ sec.cor..mkd.on brass cap $\frac{1}{2}$ S 7 in W half and S 8 in E half;and from which
	A cedar, 5 ins.dia., bears N.77°E., 204 lks. dist..mkd. $\frac{1}{2}$ S 8 B T. No other trees within limits;raise a mound of stone, 2 ft.base, 1 $\frac{1}{2}$ ft.high, W.of cor.
50.80	Leave undergrowth and enter heavy timber,bears E.and W.
61.00	Leave timber and enter dense sage brush,bears E.and W.
78.30	Old road,bears N.30°E.and S.30°W.
80.82	Fall 116 lks.East of the cor.of secs.7,8,17, and 18,which is a granite stone, 16x9x8 ins., above ground, loosely set, and mkd.and witnessed as described by the surveyor general. I destroy the old cor.and re-establish it in the same place as follows: Set an iron post, 3 ft.long, 2 ins.in dia., 24 ins.in the ground, for cor.of secs.7,8,17, and 18,mkd.on brass cap T 32 S S 7 in NW. R 6 W S 8 in NE. S.17 in SE.;and S 18 in SW.quadrants ;and raise a mound of stone 2 ft.base, 1 $\frac{1}{2}$ ff.high W.of cor.
	The course of the north half of this mile is therefore S.0°13'W., 40.37 chs. South half is S.1°26'W., 40.46 chs. Land,nearly level in Buckskin Valley.

Retracement Subdivision T.32 S., R.6 W.-Continued.

Chains	Soil, sandy loam about 3 ft. deep.; 2nd rate. Subsoil, gravel and white clay. Some rocky ground. Timber cedar and pinon pine. Undergrowth, sage brush.
	A very little grass
	Heavily timbered land, or land covered with dense undergrowth, 80.83 chs.
	South, on a retracement line bet. secs. 17 and 18.
	Over nearly level land in Buckskin Valley; through dense undergrowth.
18.50	Leave valley, bears E. and W. Asc, ridge.
37.70	Top of spur, 300 ft. above valley, bears E. and W. Desc.
41.32	Fall 3/9 lks. E. of the $\frac{1}{4}$ sec.cor. bet. secs. 17 and 18, which is a sandstone, 10x10x8 ins., above ground, firmly set, and mkd. and witnessed as described by the surveyor general. I destroy the old cor. and re-establish it in the same place as follows: Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for $\frac{1}{4}$ sec.cor. mkd. on brass cap $\frac{1}{4}$ S 18 in W half and S 17 in E half; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.
49.50	Bottom of hollow, 150 ft. below spur, course N. 70° W. Enter oak and buck brush, bears N. 70° W. and S. 70° E. Asc,
57.50	Top of ridge, 400 ft. above hollow, bears NW and SE. Enter sage brush, bears NW and SE. Desc.
81.00	Bottom hollow, 300 ft. below ridge, course W. Asc.

Retracement Sub.T.32 S., R.6 W.-Continued.

Chains

81.36 Fall 321 lks.E.of the cor.of secs.17,18,19, and 20, which is a granite stone, 12x10x6 ins., above ground, firmly set, and mkd.and witnessed as described by the surveyor general.

I destroy the old cor.and re-establish it in the same place as follows:

Set an iron post, 3 ft.long, 2 ins.in dia., 24 ins.in the ground, for cor.of secs.17,18,19, and 20, mkd.on brss cap

T 32 S S 18 in NW.

R 6 W S 17 in NE.

S 20 in SE.;and

S 19 in SW.quadrants;and raise a mound of stone, 2 ft.base, 1 $\frac{1}{2}$ ft.high, W.of cor.

The course of the north half is therefore S.4°25'W.

41.44 chs.and the south half is S.0°2'W., 40.04 chs.

N.18.50 chs.is in Buckskin Valley nearly level and sloping and draining northwesterly. Soil, sandy and gravelly loam, about 2 ft.deep, subsoil gravel. No timber. Undergrowth, sage brush. No grass . S.62.98 chs.is over rolling mountainous land sloping westerly .No timber. Soil, rocky ,about 4th rate. Undergrowth, sage, oak, and buck brush. Good grass Mountainous land, or land covered with dense undergrowth.

81.48 chs.

October 11, 1910:At this cor.I set off 6°54'S., on the decl. arc;and at 11 h 47 m a.m., l.m.t., I observe the sun on the meridian, the resulting lat.is 38°02'N., which is the proper lat.nearly.

South, on a random line betsecs.19 and 20, retracement, Over mountainous land;through dense undergrowth.

Asc.

5.60 Top of ridge, 50 ft.above cor., bears N.and W.

Retracement Sub.T.32 S., R.6 W.-Continued.

Chains	
	Desc.
11.90	Bottom of hollow, 60 ft. below spur, course W.
	Asc.
20.00	Top of spur, 40 ft. above hollow, bears E. and W. Desc.
35.80	Bottom of hollow, 170 ft. below spur, course S.80- W.
	Asc.
38.96	Fall 36 lks. West of the $\frac{1}{4}$ sec.cor. bet. secs. 19 and 20, which is a sandstone, 10x10x6 ins., above ground, loosely set, and mkd. and witnessed as described by the surveyor general. I destroy the old cor. and re-establish it in the same place as follows: Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for $\frac{1}{4}$ sec.cor.. mkd. on brass cap $\frac{1}{4}$ S 19 in W half. and S 20 in E half; and raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$ ft. high, W. of cor.
61.30	Top of spur, 100 ft. above hollow, bears E. and W. Desc.
64.80	Bottom of hollow, 80 ft. below spur, course NW. Asc.
76.10	Top of spur, 40 ft. above hollow, bears NW and SE. Desc.
79.21	Fall 74 lks. W. of the cor. of secs. 19, 20, 29, and 30, which is a sandstone, 10x10x7 ins., above ground, firmly set, and mkd and witnessed as described by the surveyor general. The old cor. is badly decayed therefore I destroy it and re-establish it in the same place as follows. Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground, for cor. of secs. 19, 20, 29, and 30, mkd. on brass cap T 32 S S 19 in NW. R 6 W S 20 in NE. S 29 in SE.; and S 30 in SW. quadrants; and raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$ ft. high, W. of cor.

Retracement Sub.T.32 S., R.6 W.-Continued.

Chains	The course of this line is therefore S.0°32'E., 79.21 chs land, mountainous, sloping and draining westerly. Soil, sandy loam mixed with cobble rock about 2 ft. deep, subsoil, gravel.
	No timber.
	Undergrowth, sage, oak, and buck brush.
	Good grass for grazing.
	Mountainous land, or land covered with dense undergrowth, 79.21 chs.
	S.89°38'W., on a retrace line bet. secs. 19 and 30. Over mountainous land; through dense undergrowth.
	Desc.
16.80	Bottom of swale, 60 ft. below cor., course S.60°W. Asc.
20.50	Top of spur, 40 ft. above swale, bears N.60°E. and S.60°W. Desc.
34.10	Creek, 2 lks. wide, 2 ins. deep, in bottom of wash, 40 lks. wide, 8 ft. deep, in hollow, 150 ft. below spur, course N.15°W. Asc.
40.20	Fall 56 lks. N. of the $\frac{1}{4}$ sec. cor. bet. secs. 19 and 30, which is an iron stone, 14x8x8 ins. above ground, loosely set, and mkd. and witnessed as described by the surveyor general. The cor. stone is poorly mkd. therefore I destroy the old cor. and re-establish it in the same place as follows: Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor. mkd. on brass cap $\frac{1}{4}$ S. 19 in N half and S 30 in S half; and raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$ ft. high, N. of cor.
54.50	Top of ridge, 150 ft. above hollow, bears N.10°W. and S.10° E. Desc.

Retracement Subdivision T.32 S., R.6 W.

Chains 73.70	Bottom of swale, 100 ft. below ridge, course N.10°W. Asc.
80.49	Fall 162 lbs. N. of the cor. of secs. 19, 24, 25, and 30, heretofore described. The course of this line is therefore S.88°50'W., 80.50 chs. Land, rolling mountains smooth slopes, drainage northwesterly. Soil, sandy loam about 2 ft. deep, mixed with lava and conglomerate rock. Subsoil, gravel and rock. No timber. Undergrowth, oak, sage, and buck brush. Good grass for grazing. Mountainous land, or land covered with dense undergrowth, 80.50 chs.
	October 11, 1910.
29.00	October 12, 1910: At 7 h 47 m a.m., l.m.t., I set off 38°01' N., on the lat.arc; 7 °12'S., on the decl.arc; and determine a meridian with the solar, at the cor. of secs. 19, 20, 29, and 30. Thence I run South, on a retrace ment line bet. secs. 29 and 30. Over mountainous land; through dense undergrowth. Desc. gradually.
40.21	Bottom of swale, 50 ft. below cor., course N.80°W. Asc. Fall 20 lbs. W. of the $\frac{1}{4}$ sec.cor. bet. secs. 29 and 30, which is a sandstone, 12x10x9 ins., above ground, firmly set, and mkd. and witnessed as described by the surveyor general.
74.60	Top of ridge, 100 ft. above swale, bears N.20°E. and S.10° W.

Retracement. Subdivision T.32 S., R.6 W.-Continued.

Chains

- 80.50 Fall 40 lks.W.of the cor.of secs.29 30,31 & 32,which is a sandstone,10x10x 6 ins.,above ground,firmly set, and mkd.and witnessed as described by the surveyor general.
I destroy the old cor.and re-establish it in the same place as follows:
Set an iron post,3 ft.long,2 in.in dia.,24 ins.in the ground,for cor.of secs.29,30,31, and 32,mkd.on brass cap
T 32 S. S 30 in NW.
R 6 W S 29 in NE.
S 32 in SE.;and
S 31 in SW.quadrants;and raise a mound of stone,2 ft.base,1 $\frac{1}{2}$ ft.high,W.of cor.
The course of this mile is therefore S.0°17'E. 80.50 chs Land,rolling mountains on West slope of high ridge .
Soil,sandy and gravelly mixed with volcanic and conglomerate rock,about 1 ft.deep,subsoil,gravel.
No timber.
Undergrowth,oak,sage, and buck brush.
A very little grass for grazing.
Mountainous land,or land covered with dense undergrowth,80.50 chs.

E.89°41'W.,on a retracement line betsecs.30 and 31.
Over mountainous land;through dense sage and oak brush.
Asc.
1.20 Top of ridge,10 ft.above cor.,bears N.8°E.and S.8°W.
Desc.
23.28 Bottom of swale,20 ft.below ridge,course N.
Asc.
27.20 Top of spur,30 ft.above swale,bears N.and S.
Desc.
31.60 Bottom of hollow,70 ft.below spur,course N.10°W.

Retracement Sub.T.32 S., R.6 W.-Continued.

Chains

Asc.

40.83 Fall 41 lks.N.of the $\frac{1}{2}$ sec.cor.betsecs.30 and 31,which is a sandstone, 9x10x8 ins.,above ground,loosely set, and mkd.and witnessed as described by the surveyor general. The cor.is poorly mkd.and loosely set,therefore I destroy the old cor.and re-establish it in the same place as follows:

Set an iron post,3 ft.long,1 in.in dia.,26 ins.in the ground,for $\frac{1}{2}$ sec.cor..mkd.on brass cap $\frac{1}{2}$ S 30 in N half. and S 31 in S half;and raise a mound of stone,2 ft.base, $1\frac{1}{2}$ ft.base.N.of cor.

50.00 Top of ridge,150 ft.above hollow,bears N.20°E.and S.20°W.
Desc.

57.25 Bottom of swale,50 ft.below ridge,course N.

Asc.

62.60 Top of spur,30 ft.above swale,bears N.20°E.and S.20°W.
Desc.abruptly.

81.08 Fall 82 lks.N.of the cor.of secs.25,30,31, and 36,heretofore described.

The course of this mile is therefore S.89°06'W.,81.08 chs. Land,mountainous with steep slopes general drainage north. Soil,sandy loam mixed with rock,about 16 ins.deep,on gravelly subsoil.

No timber.

Undergrowth,oak and sage brush.

A very little grass for grazing.

Mountainous land,or land covered with dense undergrowth.
81.08 chs.

October 18,1910:At this cor.I set off 7°16'S.,on the decl. arc;and at 11 h 47 m a.m.,l.m.t.,I observe the sun on the meridian,the resulting lat.is 38°00'N.,which is the proper lat.nearly.

Retracement Subdivision T.32 S., R.6 W.-Continued.

Chains

South, on a retrace ment line bet. secs. 31 and 32.

Over mountainous land; through dense undergrowth.

Desc.

39.87

Fall 29 lks. W. of the $\frac{1}{2}$ sec. cor. bet. secs. 31 and 32, which is a granite stone, 10x10x6 ins., above ground, firmly set, and mkd. and witnessed as described by the surveyor general.

The cor. stone is poorly mkd.; therefore I destroy the old cor. and re-establish it in the same place as follows:

Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for $\frac{1}{2}$ sec. cor.. mkd. on brass cap $\frac{1}{2}$ S 31 in W. half and S 32 in E half; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.

44.90

Bottom of hollow, 300 ft. below sec. cor., course N. 40° E.

Asc.

62.30

Top of ridge, 80 ft. above hollow, bears N. 60° E. and S. 60°

W.

Desc.

79.92

Fall 58 lks. W. of the cor. of secs. 5, 6, 31, and 32, heretofore described.

The course of this line is therefore S. 0°25' E., 79.92 chs. Land, mountainous with steep rocky slopes. drains easterly. Soil, sandy loam about 2 ft. deep, mixed with rock. Subsoil, gravel.

No timber.

Undergrowth, oak and sage brush.

A very little grass.

Mountainous land, or land covered with dense undergrowth, 79.92 chs.

October 12, 1910.

October 13, 1910: At 10 h. a.m. I run

North, on a retrace ment line bet. secs. 32 and 33, from

Retracement Subdivision T.32 S., R.6 W.-Continued.

Chains	the cor.of secs.4,5,32, and 33, on S.bdy.of Tp., heretofore described.
	Over nearly level land;in Lower Bear Valley;through dense sage brush.
4.20	Bear Creek,8 lks.wide,4 ins.deep,in wash,100 lks.wide,12 ft.deep, course E.2 chs.thence NE. Asc.gradually.
18.00	Old road,bears NE and SW.
23.00	Wash,10 lks.wide,9 ft.deep, course S.80°E.
40.00	Fall 8 lks.west of the $\frac{1}{4}$ sec.cor.betsecs.32 and 33, which is a sandstone,11x10x8 ins.,above ground,firmlly set, and mkd.and witnessed as described by the surveyor general. I destroy the old cor.and re-establish it in the same place as follows: Set an iron post,3 ft.long,1 in.in dia.,26 ins.in the ground,for $\frac{1}{4}$ sec.cor..mkd.on brass cap $\frac{1}{4}$ S 32 in W half and S 33 in E half;dig pits,18x18x12 ins.N.and S.of post 3 ft.dist.;and raise a mound of earth $3\frac{1}{2}$ ft.base, $1\frac{1}{2}$ ft/high,W.of cor.
73.50	Leave valley,bears E.and W. Asc.
81.12	Fall 17 lks.West of the cor.of secs.28,29,32, and 33,which is a granite stone,12x10x8 ins.,above ground firmly set, and mkd.and witnessed as described by the surveyor general.the stone is poorly mkd.therefore I destroy the old cor. and re-establish it in the same place as follows: Set an iron post,3 ft.long,2 ins.in dia.,24 in .in the ground,for cor.of secs.28,29,32, and 33,mkd.on brass cap T 32 S S 29 in NW. R 6 W S 29 in NE. S 33 in SE.;and S 32 in SW.quadrants;and raise a mound of stone, 2 ft.base, $1\frac{1}{2}$ ft.high,W.of cor. The course of this line is therefore N.0°7'E.,81.12 chs.

Retracement Sub.T.32 S., R.6 W.-Continued.

Chains	<p>Land, on S.73.50 chs.is over nearly level land in Lower Bear Valley, sloping gently eastward. Soil, rich clay loam free from rock and about 3 to 10 ft. deep; Subsoil, clay and gravel. No timber .Undergrowth, sage brush. No grass.</p> <p>N.7.62 chs.is on south slope of ridge, covered with volcanic rock. Soil, loam mixed with rock. No timber .Undergrowth, sage brush. No grass.</p> <p>Mountainous land, or land covered with dense undergrowth.</p> <p>81.12 chs.</p> <p>October 13, 1910: At the noon hour the sky is overcast and solar observations are impossible.</p> <hr/> <p>North, on a retracement line bet. secs. 28 and 29.</p> <p>Over mountainous land; through dense undergrowth.</p> <p>Asc.</p>
9.75	Top of spur, 50 ft. above cor., bears E. and W.
	Desc.
25.00	Bottom of swale, 200 ft. below spur, course E.
	Asc. abruptly.
37.75	Top of spur, 100 ft. above swale, bears E. and w.
	Desc.
39.20	Bottom of hollow, 40 ft. below spur, course E.
	A spring of good pure water bears East about 25 lks. dist. the creek from this spring is 3 lks. wide, and 2 ins. deep, and flows east into Bear Creek.
	Asc.
40.15	Intersect the $\frac{1}{4}$ sec.cor., bet. secs. 28 and 29, which is a sandstone, 10x10x6 ins. above ground, loosely set in the ground, and mkd. and witnessed as described by the surveyor general.
	I destroy the old cor. and re-establish it in the same place as follows:
	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the

Retracement Sub.T.32 S., R.6 W.-Continued.

Chains	ground, for $\frac{1}{4}$ sec.cor..mkd.on brass cap $\frac{1}{4}$ S 29 in W half and S 28 in E half; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W.of cor.
63.50	Top of spur, 125 ft. above hollow, bears E.and W. Desc.
68.25	Bottom of swale, 30 ft. below spur, course E. Asc.
71.00	Top of spur, 40 ft. above swale, bears E.and W. Desc.
77.10	Bottom of hollow, 75 ft. below spur, course E. Asc.
80.00	Intersect the cor.of secs.20,21,28, and 29, which is an iron stone, 12x12x10 ins., above ground, loosely set, and mkd. and witnessed as described by the surveyor general I destroy the old cor.and re-establish it in the same place as follows: Set an iron post, 3 ft.long, 2 ins.in dia., 24 insin the ground, for cor.of secs.20,21,28, and 29,mkd.on brass cap T 32 S S 20 in NW. R 6 W S 21 in NE. S 28 in SE.; and S 29 in SW.quadrants; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W.of cor. The course of this mile is therefore North 80.00 chs. Land, rough and steep mountains covered with rock and gravel sloping eastward into Lower Bear Valley. Soil, sandy loam mixed with lava x rock about 2 ft.deep. Subsoil, gravelly. No timber. Undergrowth, oak, sage, mahogany, and buck brush. Light growth of grass. Mountainous land, or land covered with dense undergrowth, 80.00 chs.

October 13, 1910.

Retracement Subdivision of T.32 S., R.6 W.-Continued.

Chains	<p>October 14, 1910: At 7 h 46 m a.m., l.m.t., I set off 38°01' N., on the lat.arc; 7°56'S., on the decl.arc; and determine a meridian with the solar, at the cor.of secs.20,21,28, and 29. Thence I run East, on a retracement line betsecs.21 and 28. Over mountainous land; through dense sage oak and mahogany brush.</p> <p>Desc.</p>
41.73	<p>Fall 38 lbs.N.of $\frac{1}{4}$ sec.cor.betsecs.21 and 28, which is an iron stone, 9x8x6 ins., above ground, firmly set, and mkd.and witnessed as described by the surveyor general. I destroy the old cor.and re-establish it in the same place as follows:</p> <p>Set an iron post, 3 ft.long, 1 in.in dia., 26 ins.in the ground, for $\frac{1}{4}$ sec.cor..mkd.on brass cap $\frac{1}{4}$ S 21 in N half and S 28 in S half;and raise a mound of stone, 2 ft.base, $1\frac{1}{2}$ ft.high, N.of cor.</p>
47.75	<p>Bottom of swale, 200 ft.below sec.cor., course S.80°E.</p> <p>Asc.</p>
54.25	<p>Top of spur, 30 ft.above swale, bears N.80°W.and S.80°E.</p> <p>Desc.</p>
61.75	<p>Foot of descent, 100 ft.below spur, bears NE and SW. Enter Lower Bear Valley.</p>
82.19	<p>Fall 74 lbs.N.of the cor.of secs.21,22,27, and 28, which is a cobble stone, 10x12x10 ins., above ground, firmly set, and mkd.and witnessed as described by the surveyor general. I destroy the old cor.and re-establish it in the same place as follows:</p> <p>Set an iron post, 3 ft.long, 2 ins.in dia., 24 ins.in the ground, for cor.of secs.21,22,27, and 28,mkd.on brass cap T 32 S S 21 in NW. R 6 W S 22 in NE. S 27 in SE.;and S 28 in SW.quadrants;and raise a mound of stone 2 ft.base, $1\frac{1}{2}$ ft.high, W.of cor.</p>

Retracement Sub.T.32 S., R.6 W.-Continued.

Chains

The course of this mile is therefore S.89°29'E., 82.19 chs.

W.61.75 chs. is over east slope of ridge over boulders and rock drains northeasterly. Soil, gravelly loam hard and dry. Subsoil gravelly. No timber. Undergrowth, sageoak, and mahogany. Some good grass.

E.20.44 chs. over nearly level valley land sloping gently to the northeast. Soil, sandy loam about 2 ft. deep, laterite soft and rich. gravelly subsoil. No timber. Undergrowth, sage brush. Good grass for grazing.

Mountainous land, or land covered with dense undergrowth, 82.19 chs.

North, on a retrace ment line bet. secs. 21 and 22.

Over nearly level valley land; through dense sage brush. Desc. gradually.

33.50 Bottom of swale, 20 ft. below cor., course S.80°E.
Asc. gradually.

34.00 Enter heavy cedar and pinon pine timber, bears NE and SW.
Leave undergrowth, bears NE and SW.

35.00 Leave valley, bears NE and SW.
Asc.

40.33 Fall 40 lks. East of the $\frac{1}{4}$ sec.cor. bet. secs. 21 and 22, which is a cobble stone, 8x12x6 ins., above ground, loosely set, and mkd. and witnessed as described by the surveyor general.

I destroy the old cor. and re-establish it in the same place as follows:

Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for $\frac{1}{4}$ sec.cor.. mkd. on brass cap $\frac{1}{4}$ S 21 in W half and S 22 in E half; from which

A cedar, 21 ins. dia., bears S.21°E., 257 lks.
dist.. mkd. $\frac{1}{4}$ S 22 B T.

Retracement Sub.T.32 S., R.6 W.-Continued.

Chains

A red pine, 30 ins. dia., bears S.59°W., 126 lks.
dist..mkd. $\frac{1}{4}$ S 21 B T.

46.50 Top of spur, 35 ft. above hollow, bears NW and SE.

Desc.

50.00 Leave timber, bears NW and SE.

Enter dense undergrowth, bears NW and SE..

51.45 Old wood road, bears NW and SE.

55.00 Bottom of swale, 30 ft. below spur, course S.70°E.

Asc.

58.40 Top of spur, 40 ft. above swale, bears N.70°W. and S.70°E.

Desc.

61.00 Bottom of swale, 25 ft. below spur, course S.80°E.

Asc.

80.52 Fall 80 lks. East of the cor.of secs.15,16,21, and 22,
which is a granite stone, 10x8x4 ins., above ground, firmly
set, and mkd. and witnessed as described by the surveyor
general.

I destroy the old cor. and re-establish it in the same
place, as follows:

Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the
ground, for cor.of secs.15,16,21, and 22, mkd.on brass.cap

T 32 S S 16 in NW.

R 6 W S 15. in NE.

S 22 in SE.; and

S 21 in SW. quadrants; and raise a mound of stone,
2 ft. base, $1\frac{1}{2}$ ft. high, w. of cor.

The course of this mile is therefore N.0°34'W., 80.52 chs.
Land, mountainous slopes and drains easterly.

Soil, black loam about 2 ft. deep, mixed with some rock,
Subsoil, gravelly .

Timber, cedar and pinon pine.

Undergrowth, sage, oak, and buck brush.

Light growth of grass.

Mountainous or heavily timbered land, or land covered
with dense undergrowth, 80.52 chs.

Retracement Sub.T.32 S., R.6 W.-Continued.

Chains October 14, 1910: At this cor. I set off 8°01'S., on the decl. arc; and at 11 h 46.8 a.m., l.m.t., I observe the sun on the meridian, the resulting lat. is 38°02'N., which is the proper lat. nearly.

North, on a retracement line bet. secs. 15 and 16.

Over mountainous land; through dense undergrowth.

Asc.

6.50 Top of spur, 110 ft. above cor., bears E. and W.

Desc

14.00 Wash, 20 lks. wide, 4 ft. deep, in bottom of hollow, 70 ft. below spur, course E.

Asc.

16.00 Old wood road, bears NW and SE.

21.00 Enter heavy timber, bears NE and SSW.

37.00 Top of spur, 100 ft. above hollow, bears NW and SE.

Desc.

37.50 Bottom of swale, 15 ft. below spur, course E.

Asc.

38.50 Top of spur, 20 ft. above hollow, bears N.80°W. and S.80°E.

Desc.

40.00 Intersect the $\frac{1}{4}$ sec. cor. bet. secs. 15 and 16, which is a white sandstone, 14x10x8 ins. lying on the ground, mkd. and witnessed as described by the surveyor general.

I destroy the old cor. and re-establish it in the same place as follows:

Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor.. mkd. on brass cap $\frac{1}{4}$ S 16 in W half and S 15 in E half; from which

A mahogany, 5 ins. dia., bears N.16° E., 25 lks.

dist.. mkd. $\frac{1}{4}$ S 15 B T.

A mahogany, 6 ins. dia., bears N.11°W., 37 lks.

dist.. mkd. $\frac{1}{4}$ S 16 B T.

Retracement Sub.T.32 S., R.6 W.-Continued.

Chains	
41.00	Leave timber, bears E. and W.
57.90	Bottom of hollow, 30 ft. below spur, course S.16°E. Asc.
77.20	Top of spur 250 ft. above hollow, bears N.30°E. and S.80°W. Desc.
79.92	Intersect the cor. of secs. 9, 10, 15, and 16, which is a limestone, 10x8x5 in., above ground, firmly set and mkd. and witnessed as described by the surveyor general. I destroy the old cor. and re-establish it in the same place as follows: Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground, for cor. of secs. 9, 10, 15, and 16, mkd. on brass cap T 32 S S 9 in NW. R 6 W S 10 in NE. S 15 in SE.; and S 16 in SW. quadrants; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. The course of this mile is therefore North, 79.92 chs. Land, mountainous. Soil, sandy loam; 2nd rate. Timber, cedar and pinon pine. Undergrowth, oak and sage brush. Good grass for grazing. Mountainous or heavily timbered land, or land covered with dense undergrowth, 79.92 chs.
	October 14, 1910.
	<i>John R Stewart</i> Instrumentman G.L.O.

Retracement Sub.T.32 S., R.6 W.-Continued.

Chains

Survey commenced October 16, 1910, and executed with a Young and Sons light mountains transit, No. 7382, with solar attachment. The horizontal limb is provided with two double verniers placed opposite to each other, reading to single minutes of arc; which is also the least count of the latitude and declination arcs.

The instrument was examined, tested on the meridian, at Salt Lake City, found correct, and was approved by the surveyor general for Utah, on August 6, 1910.

I examine the adjustments of the instrument, and correct the level and collimation errors; then, to test the solar apparatus by comparing its indications resulting from solar observations made during p.m. and a.m. hours with a meridian established by Polaris observation I proceed as follows:

At the cor. of secs. 9, 10, 15, and 16, latitude $38^{\circ}02'32''$ N., longitude $112^{\circ}29'56''$ W., I set off $38^{\circ}03'$ N., on the lat. arc; $8^{\circ}48'$ S., on the decl. arc; and at 3 h 47 m p.m., l.m.t., I determine a meridian with the solar, and mark a point thereof on a stone firmly set in the ground, 5.00 chs. N. of the cor.; ~~mark~~ ~~fix~~

At 5 h 55 m p.m., l.m.t., I observe the Polaris at eastern elongation, in accordance with the Manual and mark a point in the line thus determined by a tack driven in a wooden plug set in the ground, 500 lks. N. of the cor.

October 16, 1910.

October 17, 1910: At 7 h 30 m a.m., l.m.t., I lay off the azimuth of Polaris $1929.4'$ to the west and mark a point in the meridian thus determined by cutting a small groove in the stone already set 5.00 chs. N. of the cor.; this mark falls .35 ins. east of the meridian established by the solar.

Retracement Sub.T.32 S., R.6 W.-Continued.

Chains

At 7 h 46 m a.m., l.m.t., I set off $38^{\circ}03'N.$, on the lat. arc; $9^{\circ}03'S.$, on the decl. arc; and determine a meridian with the solar, and mark a point thereof by a cross on the stone already set 5.00 chs. N. of the cor.; this mark falls 0.35 ins. east of the meridian established by Polaris observation.

The solar apparatus by p.m. and a.m. observations defines positions for meridians respectively about $0'18''$ west and $0'18''$ east of the meridian established by Polaris observation; therefore I conclude that the adjustments of the instrument are satisfactory.

The magnetic bearing of the meridian at 8 h 30 m a.m. is N. $16^{\circ}02'W.$, the angle thus determined gives the mag. decl. $16^{\circ}02'E.$

From the cor. of secs. 9, 10, 15, and 16, heretofore described. Thence I run

S. $89^{\circ}42'E.$, on a retracement line bet. secs. 10 and 15: Over mountainous land; through dense undergrowth.

Desc.

8.80 Granite boulder 15x10x6 ft. on line.

14.50 Bottom of hollow, 100 ft. below cor., course S.

Asc.

22.50 Top of rocky knoll 200 ft. high.

Desc.

36.50 Head of hollow, 200 ft. below knoll, course S. $20^{\circ}E.$

Asc.

37.50 Top of spur, 40 ft. above hollow, bears N. and S.

Desc.

39.60 Bottom of hollow, 30 ft. below spur, course S.

Asc.

40.02 End 21ks. S of the sec. cor. bet. secs. 10 and 15, which is

Retracement Sub.T.32 S., R.6 W.-Continued.

Chains

A granite stone, 12 x12x10 ins., above ground, firmly set, and mkd.and witnessed as described by the surveyor general.

I destroy the old cor.and re-establish it in the same place as follows:

Set an iron post,3 ft.long,1 in.in dia.,26 ins.in the ground,for $\frac{1}{4}$ sec.cor..mkd.on brass cap $\frac{1}{4}$ S 10 in N half and S 15 in S half;and raise a mound of stone,2 ft.base, $1\frac{1}{2}$ ft.high,N.of cor.

43.80 Road from Beaver to Panguitch,bears N.70°W.and S.70°E.

60.00 Top of ridge,400 ft.above hollow,bears N.15°E.and S.15°W
Desc.

Enter scattering cedar and pinon pine timber,bears N.and S.

74.50 Bottom of hollow,300 ft.below ridge,course SE.

Asc.

78.58 Fall 69 lks.S.of the cor.of secs.10,11,14, and 15,which is a cedar,7 ins.in dia.,mkd.and witnessed as described by the surveyor general.The tree cor.is nearly dead therefore I set an iron post,3 ft.long,2 ins.in dia.,24 ins.in the ground,against the tree cor.without destroying the tree cor,for cor.of secs.10,11,14, and 15,mkd.on brass cap

T 32 S S 10 in NW.

R 6 W S 11 in NE.

S 14 in SE.;and

S 15 in SW.quadrants;No change in bearings and distances to bearing trees which were all found in good condition.

The course of the west half of this line is therefore East 40.02 chs.;the east half is N.89°35'E.,38.56 chs.Land,mountainous sloping and draining southerly into Lower Bear Valley.

Soil,black loam mixed with gravel and rock;2nd rate.about 1 ft.deep,subsoil gravel.

Retracement Sub.T.32 S., R.6 W.-Continued.

Chains	Timber, cedar and pinon pine. Undergrowth, dense sage and scattering oak brush. A litte grass in the hollows. Mountainous land, or land covered with dense undergrowth, 78.58 chs.
	Leave timber, bears N.70°E. and S.70°W. Over volcanic boulders and low ledges.
6.00	Top of ridge, 100 ft. above cor., bears E. and W. Desc.
15.50	Bottom of hollow, 50 ft. below ridge, course S.60°E. Asc.
26.00	Foot of volcanic ledge, 20 ft. high, bears NE. and SW.
31.50	Top of main ridge, 200 ft. above hollow, bears N.70°E. and S.70°W. Leave timber, bears N.70°E. and S.70°W. Desc. through dense sage brush.
40.00	Intersect $\frac{1}{2}$ sec.cor. bet.secs.10 and 11 which is a granite stone, 11x9x9 ins., above ground, firmly set, and mkd. and witnessed as described by the surveyor general. I destroy the old cor. and re-establish it in the same place as follows: Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for $\frac{1}{2}$ sec.cor.. mkd. on brass cap $\frac{1}{2}$ S 10° in W half and S 11° in E half; and raise a mound of stone, $\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high, W. of cor.
43.60	Bottom of hollow, 100 ft. below ridge, course N.50°E. Asc.
60.00	Top of spur, 50 ft. above hollow, bears E. and W. Desc.
73.00	Bottom of hollow, 200 ft. below spur, course N.80°E.

Retracement Sub.T.32 S., R.6 W.-Continued.

Chains	Asc.
79.32	<p>Intersect the cor.of secs.2,3,10, and 11, which is a volcanic stone, 10x9x8 ins., above ground, firmly set, and mkd. and witnessed as described by the surveyor general. I destroy the old cor. and re-establish it in the same place as follows:</p> <p>Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground, for cor.of secs.2,3,10, and 11,mkd.on brass cap T 32 S S 3 in NW.</p> <p>R 6 W S 2 in NE.</p> <p>S 11 in SE.; and</p> <p>S 10 in SW quadrants; from which</p> <p>A mahogany, 8 ins.dia., bears N.53°35'E., 31 lks. dist..mkd.T 32 S R 6 W S 2 B T.</p> <p>A mahogany, 4 ins.dia., bears N.73°W., 23 lks. dist..mkd.T 32 S R 6 W S 3 B T.</p> <p>No other trees within limits;raise a mound of stone, 2 ft.base, 1½ ft.high,W.of cor.</p> <p>The course of this mile is therefore North, 79.32 chs. Land, mountainous and very rough .</p> <p>Soil, black loam about 2 ft.deep, moist and rich ,mixed with volcanic rock and covered with boulders.</p> <p>Timber,cedar and pinon pine.</p> <p>Undergrowth,oak,sage, and mahogany.</p> <p>Good grass for grazing.</p> <p>Mountainous land, or land covered with dense undergrowth, 79.32 chs.</p> <p>October 17,1910:At this cor.I set off 9°08'S.,on the decl.arc;and at 11 h 46 m a.m.,l.m.t.,I observe the sun on the meridian;the resulting lat.is 38°03'N.,which is the proper lat.nearly.</p> <p>N.0°34'W.,on a retracement line betsecs.2 and 3.</p>

Retracement Sub.T.33 S., R.6 W. Continued.

Chains	Over mountainous land; through dense oak, mahogany and sage brush. Asc. over small ledges.
14.00	Top of ridge, 200 ft. above cor., bears N.80°E. and S.80°W. Desc.
20.90	Leave oak brush, bears E. and W.
24.40	Bottom of hollow, 200 ft. below ridge, course N.40°E. Asc.
37.80	Fall 6 $\frac{1}{4}$ lks. E. of the $\frac{1}{4}$ sec. cor. bet. secs. 2 and 3, which is a volcanic stone, 10x9x9 ins. above ground, firmly set, and mkd. and witnessed as described by the surveyor general. 1. destroy the old cor. and re-establish it in the same place as follows: Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor. mkd. on brass cap $\frac{1}{4}$ S 3 in W half and S 2 in E half; and raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$ ft. high, W. of cor.
43.00	Top of spur, 75 ft. above hollow, bears NE and SW. Desc.
54.00	Bottom of hollow, 200 ft. below spur, course E. Asc.
77.80	Fall 13 $\frac{1}{4}$ lks. east of the cor. of secs. 2, 3, 34, and 35, heretofore described. The course of this mile is therefore N.1°32'W., 77.90 chs. Land, mountainous with steep slopes and numerous small ledges and rock. Soil, rich black loam very fertile mixed with some rock, but producing an abundant growth of brush and considerable grass. No timber. Undergrowth, oak, mahogany, and sage brush. Mountainous land, or land covered with dense undergrowth, 77.90 chs.

Retracement subdivision of T.32 S., R.6 W.-Continued.

Chains

October 17, 1910.

October 20, 1910: At 7 h 45 m a.m., l.m.t., I set off $38^{\circ}03'N$ on the lat.arc; $10^{\circ}08'S.$, on the decl.arc; and determine a meridian with the solar, at the cor.of secs.7,8,17, and 18, heretofore described.

Thence I run

$S.89^{\circ}30'E.$, on a retracement line bet.secs.8 and 17.

over nearly level land in Buckskin Valley; through dense sage brush.

Asc.gradually.

4.00 Leave valley, bears N.and S.

Asc.southwest slope of ridge.

Enter dense oak and buck brush., bears N.and S.

12.00 Leave oak and buck brush and enter dense mahogany brush, bears N.and S.

Enter scattering cedar and pinon pine timber, bears N.and S.

19.00 Leave dense and enter scattering mahogany brush, bears NE and SW.

Leave live timber and enter standing burnt timber, bears NE and SW.

25.00 Leave burnt timber and enter heavy cedar and pinon pine timber, bears NE and SW.

35.40 Top of ridge, 600 ft.above cor., bears NW and SE.

Leave timber, bears NW and SE.

Enter dense mahogany, oak, and buck brush, bears NW and SE.

Desc.

39.90 Fall 35 1/2 ft. S of the $\frac{1}{2}$ sec.cor.bet.secs.8 and 17, which is a sandstone, 11x9x7 ins., above ground, firmly set, and mkd.and witnessed as described by the surveyor general.

I destroy the old cor.and re-establish it in the same place as follows:

Retracement Sub.T.32 S., R.6 W.-Continued.

Chains

Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor.. mkd. on brass cap $\frac{1}{4}$ S 8 in N half and S 17 in S half; from which

A mahogany, 5 ins. dia., bears N. 22° W., 39 lks.

dist.. mkd. $\frac{1}{4}$ S 8 B T.

A mahogany, 4 ins. dia., bears S. 17° E., 20 lks.

dist.. mkd. $\frac{1}{4}$ S 17 B T.

44.00 Bottom of hollow, 100 ft. below ridge, course N. 40° W.

Asc.

67.00 Top of ridge, 200 ft. above hollow, bears N. and SW.

Leave oak and buck brush and enter dense mahogany , bears N. and SW.

Enter scattering cedar and pinon pine timber, bears N. and SW.

Desc.

72.00 Bottom of hollow, 50 ft. below ridge, course S. 10° E.

Asc.

73.00 Enter heavy timber, bears N. and S.

82.29 Fall 55 lks. S. of the cor. of secs. 8, 9, 16, and 17, hereinafter described.

The course of the west half of this mile is therefore East 39.90 chs. the east half is N. 89° 45' E., 42.39 chs.

W. 4.00 chs. in Buckskin Valley nearly level and sloping gently to the west. Soil, sandy loam about 3 ft. deep, subsoil, gravel. E. 78.29 chs. over rough mountainous land; with steep rocky slopes .Soil, sandy and clay loam about 1 ft. deep, subsoil, clay and gravel.Timber, cedar and pinon pine.Undergrowth, oak, sage, mahogany , and buck brush. Good grass for grazing.

Mountainous or heavily timbered land, or land covered with dense undergrowth, 82.29 chs.

East, on a retrace ment line bet. secs. 9 and 16.

Retracement Sub.T.32 S., R.6 W.-Continued.

Chians	Over mountainous land; through heavy cedar and pinon pine timber and scattering mahogany brush.
	Asc.
7.10	Top of ridge, 100 ft. above cor., bears N.10°W. and S.10°E.
	Desc.
15.00	Bottom of hollow, 100 ft. below ridge, course N.
	Asc.
31.00	Leave cedar and pinon pine and enter heavy red pine timber, bears N. and S.
39.98	fall 30 lks. N. of the $\frac{1}{2}$ sec. cor. bet. secs. 9 and 16, which is a sandstone, 9x10x8 ins., above ground, firmly set, and mkd. and witnessed as described by the surveyor general. The cor. is poorly mkd. and the bearing trees have been cut down, therefore I destroy the old cor. and re-establish it in the same place as follows: Set an iron post, 3 ft. long, 1 in. in dia., 20 ins in the ground, on solid rock, and surrounded by mound of earth and stone, for $\frac{1}{4}$ sec. cor.. mkd. on brass cap $\frac{1}{2}$ S 9 in N half and S 16 in S half; from which A red pine, 8 ins. dia., bears N.12°W., 15 lks. dist..mkd. $\frac{1}{4}$ S 9 B. T. A red pine, 7 ins. dia., bears S.27°E., 10 lks. dist..mkd. $\frac{1}{4}$ S 16 B. T.
45.00	Top of spur, 100 ft. above hollow, bears N. and S.
	Desc.
47.25	Leave timber and enter dense oak, sage, and buck brush, bears N. and S.
61.00	Bottom of hollow, 200 ft. below spur, course N.20°W.
	Asc.
65.00	Top of main ridge, 50 ft. above hollow, bears N.70°E. and S.70°W.
	Desc.
75.00	Head of hollow, 50 ft. below ridge, course S.10°W.
	Asc.

Retracement Subdivision of T.32.S., R.6 W.-Continued.

Chains 79.90	Fall 60 lks.N.of the cor.of secs.9,10,15, and 16, heretofore described. The course of this line is therefore S.89°34'E; 79.90 chs Land, mountainous with steep slopes draining northerly and southerly. Soil, black loam, about 2 ft. deep, mixed with rock. Subsoil, gravel. Timber, cedar, pinon pine, red, and white pine. Undergrowth, oak, mahogany, oak and buck brush. Good grass for grazing. Mountainous or heavily timbered land, or land covered with dense undergrowth, 79.90 chs. October 20, 1910: At this cor. I set off 10°13'S., on the decl arc; and at 11 h 45 m a.m., l.m.t., I determine a meridian with the solar, the resulting lat. is 38°03'N., which is the proper lat. nearly.
	October 20, 1910.
—	—
	—
13.80	October 21, 1910: At 7 h 45 m a.m., l.m.t., I set off 38°03' N., on the lat.arc; 10°30'S., on the decl.arc; and determine a meridian with the solar, at the cor.of secs.5,6,7, and 8, heretofore described. Thence I run
15.10	East, on a retracement line bet.secs.5 and 8. Over nearly level valley; through dense sage brush.
20.00	Road from Beaver to Panguitch, bears NW and SE. wash, 15 lks.wide, 10 ft.deep, course NW. Asc.gradually.
33.00	Leave valley, bears NW and SE. Asc.
40.12	Enter heavy cedar and pinon pine timber, bears N.and S. fall 7 lks.N.of the $\frac{1}{2}$ sec.cor.bet.secs.5 and 8, which is

Retracement Subdivision T.32 S., R.6 W.-Continued.

Chains	granite stone, 12x9x9 ins., above ground, loosely set and mkd. and witnessed as described by the surveyor general, the cor. is loosely set, and poorly mkd. therefore i destroy the old cor. and re-establish it in the same place as follows: Set an iron post, 3 ft. long, 1 in. in diam. 20 ins. in the ground, on bed rock, and surrounded by mound of earth and stone, for $\frac{1}{4}$ sec. cor.. mkd. on brass cap $\frac{1}{2}$ S 5 in N half and S 8 in S half; from which A cedar, 12 ins. dia., bears N.83°W., 20 lks. dist.. mkd. $\frac{1}{2}$ S 5 B T. A cedar, 14 ins. dia., bears S.70°E., 25 lks. dist.. mkd. $\frac{1}{2}$ S 8 B T.
43.50	Leave heavy and enter scattering timber, bears N. and S.
53.00	Top of ridge, 300 ft. above hollow, bears N. and S. Desc.
70.00	Bottom of hollow, 100 ft. below ridge, course S.10°W. Asc.
73.50	Top of spur, 50 ft. above hollow, bears N.10°E. and S.10°W. Desc.
80.29	Fall 14 lks. N. of the cor. of secs. 4, 5, 8, and 9, hereinafter described. The course of this line is therefore S.89°54'E., 80.29 chs. ^{do.} W.20.00 over gently sloping valley land, with sandy loam soil about 6 ft. deep, mixed with some rock and gravel, subsoil, gravel and clay. no timber. Undergrowth sage brush no grass. E.60.29 chs. over rolling mountainous land with south slope and draining south. Soil, sandy clay loam about 18 ins. deep, on subsoil of clay and rock. Timber, cedar and pinon pine. Undergrowth, sage and oak brush. A little grass in patches. Mountainous or heavily timbered land or land covered with dense undergrowth, 80.29 chs.

Retracement Sub.T.32 S., R.6 W.-Continued.

Chains

Dunphy-Stewart

Instrumentman G.L.O.

October 17, 1910: At 7 h 46 m a.m., l.m.t., I set off $38^{\circ}03'$ N., on the lat.arc; $9^{\circ}08' E.$, on the decl.arc; and determine a meridian with the solar, at the cor.of secs.7,12,13, and 18, on E.bdy.of Tp., which is a granite stone, $12 \times 8 \times 6$ ins. above ground, firmly set, and mkd. and witnessed as described by the surveyor general, the corlstone is very poorly mkd. therefore I destroy the old cor. and re-establish it in the same place as follows:

Set an iron post, 3 ft.long, 3 ins.in dia., 20 ins.in the ground, on solid rock, and surrounded by mound of earth and stone, for cor.of secs.7,12,13, and 18,mkd.on brass cap

T 32 S in N half.

R 6 W S 12 in NW.

R 5 W S 7 in NE.

S 18 in sE.; and

S 13 in SW.quadrants; and raise a mound of stone, 2 ft.base, $1\frac{1}{2}$ ft.high, W.of cor.

Thence I run

West, on a retracement line betsecs.12 and 13,

Over mountainous land; through dense oak,buck, and sage brush.

Asc.

2.00 Top of ridge, 20 ft.above cor., bears NE and SW.

Desc. over rocks and boulders.

11.50 Perpendicular volcanic ledge, 20 ft.high, bears N.and S.

31.00 Leave oak and buck brush and enter dense sage brush, bears N.and S.

40.85 Intersect $\frac{1}{4}$ sec.cor.betsecs.12 and 13, which is a granite stone, $11 \times 12 \times 7$ ins., above ground, firmly set, and mkd. and witnessed as described by the surveyor general.

I destroy the old cor. and re establish it in the same

Retracement Sub.T.32 S., R.6 W.-Continued.

Chains	place as follows:
	Set an iron post, 3 ft. long, 1 in. in dia., 21 ins. in the ground, on solid rock, and surrounded by mound of earth and stone, for $\frac{1}{4}$ sec. cor.. mkd. on brass cap $\frac{1}{2}$ S 12 in N half and S 13 in S half; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, N. of cor.
61.00	old road, bears NE and SW.
62.00	Bottom of hollow, 700 ft. below ridge, course SW. Asc.
80.85	intersect the cor. of secs. 11, 12, 13, and 14, which is a granite stone, 11x12x6 ins., above ground, loosely set, and mkd. and witnessed as described by the surveyor general. The cor. is poorly set, therefore i destroy the old cor. and re-establish it in the same place as follows: Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground, for cor. of secs. 11, 12, 13, and 14, mkd. on brass cap T 32 S S 11 in NW. R 6 W S 12 in NE. S 13 in SE.; and S 14 in SW. quadrants; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high W. of cor. The course of this mile is therefore West, 80.85 chs. land, mountainous steep west slope covered with volcanic rock and boulders. Soil, black loam about 14 ins. deep and mixed with black volcanic rock and covered with boulders and rock. no timber. Undergrowth, oak, sage and buck brush. A very little grass. Mountainous land, or land covered with dense undergrowth, 80.85 chs. South, on a retrace ment line bet. secs. 13 and 14.

Retracement Sub.T.32 S., R.6. W.-Continued.

Chains	Over rolling mountainous land; through dense sage brush.
	Desc.
14.75	Bottom of hollow, 50 ft. below cor., course S.40°W.
	Asc.
16.00	Old road, bears NE and SW.
40.90	Fall 6 lks.W.of the $\frac{1}{4}$ sec.cor.betsecs.13 and 14, which is a granite stone, 16x8x6 ins. lying on the ground partly covered; and mkd. and witnessed as described by the surveyor general.
	I destroy the old cor. and re-establish it in the same place as follows:
	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for $\frac{1}{4}$ sec.cor.. mkd. on brass cap $\frac{1}{4}$ S 14 in W half and S 13 in E half; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.
61.00	Wash, 50 lks.wide, 6 ft. deep, course W.
	Asc.
69.80	Wash, 30 lks.wide, 8 ft. deep, course N.75°W.
	Asc.
81.00	Fall 12 lks.W. of the cor. of secs.13, 14, 23, and 24, which is a granite stone, 12x13x7 ins. above ground, firmly set, and mkd. and witnessed as described by the surveyor general.
	I destroy the old cor. and re-establish it in the same place as follows:
	Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground, for cor. of secs.13, 14, 23, and 24, mkd. on brass cap T 32 S S 14 in NW.
	R 6 .W S 13 in NE.
	S 24 in SE.; and
	S 23 in SW. quadrants; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.
	The course of this mile is therefore S.0°5'E., 81.00 chs. Land, rolling mountains with gradual slopes draining westward into Lower Bear Valley.
	Soil, black loam about 3 ft. deep, mixed with volcanic rock.

Retracement Sub.T.32 S., R.6 W.-Continued.

Chains	Subsoil, gravel and clay. No timber. Undergrowth, dense sage brush on entire mile. A very little grass. Mountainous land, or land covered with dense undergrowth, 81.00 chs.
	October 17, 1910 At this cor. I set off 9°08'S., on the decl arc; and at 11 h 46 m a.m., l.m.t., I observe the sun on the meridian the resulting lat. is 38°02' N., which is the proper lat. nearly.
	South, on a retracement line bet. secs. 23 and 24. Over rolling mountainous land; through dense sage brush. Desc.
4.00	Wash, 10 lks. wide, 6 ft. deep, in hollow, 30 ft. below cor., course NW.
	Asc.
15.40	Top of ridge, 30 ft. above hollow, bears E. and W.
	Desc.
20.00	Bottom of hollow, 30 ft. below ridge, course N.80°W.
	Asc.
32.50	Top of spur, 50 ft. above hollow, bears E. and W.
	Desc.
32.75	Leave dense and enter scattering sage brush, bears E. and W. Enter scattering cedar and pinon pine timber, bears E. and W.
39.90	Creek, 1 lk. wide, 1 in. deep, in bottom of hollow, 50 ft. below spur, course N.80°W.
	Asc.
40.42	Fall 36 lks. W. of the $\frac{1}{4}$ sec. cor. bet. secs. 23 and 24, which is a granite stone, 11x8x7 ins., above ground, firmly set, and mkd. and witnessed as described by the surveyor general, I destroy the old cor. and re-establish it in the same

Retracement Sub.T.32 S., R.6 W.-Continued.

Chains

place as follows:

Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor.. mkd. on brass cap $\frac{1}{4}$ S 23 in W half and S 24 in E half; from which mound of stone, 2 ft. base,

A cedar, 12 ins. dia., bears S.9°E., 148 lks.

dist.. mkd. $\frac{1}{4}$ S 24 B T.

and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.

55.40 Top of ridge, 100 ft. above hollow, bears N.60°W. and S.60°E.

Desc.

67.50 Bottom of hollow, 100 ft. below ridge, course W.

Asc.

76.00 Top of ridge, 1000 ft. above hollow, bears N E and SW.

Desc.

80.42 Fall 72 lks. West. of the cor. of secs. 23, 24, 25, and 26, which is a granite stone, 24x8x8 ins., above ground, firmly set, and mkd. and witnessed as described by the surveyor general.

I destroy the old cor. and re-establish it in the same place as follows:

Set an iron post, 3 ft. long, 2 ins. dia., 24 ins. in the ground, for cor. of secs. 23, 24, 25, and 26. mkd. on brass cap

T 32 S S 23 in NW..

R 6 W S 24 in NE.

S 25 in SE.; and

S 26 in SW. quadrants; from which

A pinon pine, 8 ins. dia., bears S.25°W., 134 lks.

dist.. mkd. T 32 S R 6 W S 26 B T.

Note: The other bearing trees were correct in the original notes.

The course of this line is therefore S.0°31'E., 80.42 chs.

Land, rolling mountains with smooth and gradual slopes draining westerly into Lower Bear Valley.

Soil, black loam and rich but mixed with rock. Subsoil, gravel and rock.

Retracement Sub.T.32 S., M.6 W.-Continued.

Chains

Timber, scattering cedar and pinon pine.
 Undergrowth, sage brush.
 Good grass in patches.
 Mountainous land, or land covered with dense undergrowth.
 30.42 chs.

X.89°46'W., on a retracement line bet. secn. 23 and 26.
 Over mountainous land; through scattering timber and
 scattering undergrowth.

Asc.

5.50 Top of ridge, 100 ft. above cor., bears NW and SW.

Desc.

11.80 Head of hollow, 100 ft. below ridge, course NW.

Asc.

18.90 Top of ridge, 200 ft. above hollow, bears NW and SW.

Desc.

39.80 Fall 3 lmn.S. of the $\frac{1}{2}$ sec.cor. bet.secns. 23 and 26.

Note : The cor. stone was not found but was re-established
 the proper course and distance from the bearing tree as
 follows:

Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the
 ground, for $\frac{1}{2}$ sec.cor.. mka. on brass cap $\frac{1}{2}$ S 23 in N half
 and S 26 in S half; from which

A pinon pine, 12 ins. in dia., bears N.10°E., 60 lmn.
 dist.; mka. $\frac{1}{2}$ S 23 E. E.

No other trees within limits; raise a mound of stone,
 2 ft. base, 1 $\frac{1}{2}$ ft. high, N. of cor.

The course of this half mile is therefore X.89°44'W.,
 39.80 chs.

Land, mountainous.

Soil, sandy and clay loam; 2nd rate.

Timber, scattering cedar and pinon pine.

Undergrowth, scattering oak and sage brush.

Retracement Sub.T.32 S.,R.6 W.-Continued.

Chains

Good grass for grazing.

Mountainous land, 39.80 chs.

October 17, 1910.

John R Stewart

Instrumentman G.L.O.

Subdivision T.32 S.,R.6 W.

Survey commenced October 20, 1910, and executed with a W. and L.E. Gurley Explorer's transit, No. 957, with solar attachment. The horizontal limb is provided with two double verniers placed opposite to each other, reading to single minutes ~~with~~ of arc; which is also the least count of the latitude and declination arcs.

The instrument was examined tested on the meridian at Salt Lake City, found correct, and was approved by the surveyor general for Utah, on August 6, 1910.

Note : For test of instrument see notes of Retracement Subdivision this township and in this book.

At the cor. of secs. 23, 24, 25, and 26, I set off $38^{\circ}01'N.$, on the lat.arc; $10^{\circ}08'S.$, on the decl.arc; and at 7 h 45 m a.m., I determine a meridian with the solar, at the cor. of

Thence I run

East, on a random line bet. secs. 24 and 25.

40.00 Set temp. $\frac{1}{4}$ sec.cor.

80.16 Intersect E.bdy. of Tp., 5 lks.S. of the cor. of secs. 19, 24, 25, and 30, heretofore described.

Thence I run

$S.89^{\circ}58'W.$, on a true line bet. secs. 24 and 25.

Over mountainous land; through heavy cedar and pinon pine timber.

Sub.T.32 S., R.6 W.-Continued.

Chains	
	Asc.
3.00	Top of ridge, 50 ft. above cor., bears N.10°E. and S.10°W.
	Desc.
14.10	Bottom of hollow, 50 ft. below ridge, course S.10°W.
	Asc.
20.00	Top of low ridge, 50 ft. above hollow, bears N. and S.
	Desc.
28.80	Bottom of hollow, 20 ft. below ridge, course S.25°W.
	Asc.
39.10	Top of ridge, 200 ft. above hollow, bears N. and S.
	Desc.
40.08	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor.. mkd. on brass cap $\frac{1}{4}$ S 28 in N half and S 25 in S half; from which
	A cedar, 6 ins. dia., bears N.60°W., 3 lks.
	dist.. mkd. $\frac{1}{4}$ S 24 B T.
	A cedar, 8 ins. dia., bears S.31°E., 30 lks.
	dist.. mkd. $\frac{1}{4}$ S 25 B T.
47.10	Bottom of hollow, 200 ft. below ridge, course S.
	Asc.
58.60	Top of ridge, 200 ft. above hollow, bears NW and SE.
	Desc.
69.10	Bottom of hollow, 100 ft. below ridge, course S.10°W.
	Asc.
80.16	The cor. of secs. 23, 24, 25, and 26. Land, mountainous and broken drainage is south into Bear Creek. Slopes are steep and covered with rock. Soil, sandy loam mixed with rock and gravel about 18 ins. deep, Subsoil, gravel. Timber, cedar and pinon pine. Good grass for grazing in patches. Mountainous or heavily timbered land, 80.16 chs. October 20, 1910: At this cor. I set off 10°13'S., on the decl. arc; and at 11 h 45 m a.m., l.m.t., I observe the sun on the meridian the resulting lat. is 38°01'N., which is the

Subdivision of T.32 S., R.6 W.-Continued.

Chains

proper lat.nearly.

From the cor.of secs.13,14,23, and 24, heretofore described

I run

N.89°58'E., on a random line betsecs.13 and 24.

40.00 Set temp. $\frac{1}{4}$ sec.cor.80.84 Intersect E.bdy.of Tp., 40 lks.N.of the cor.of secs.13,18,19,
19, and 24.heretofore described.

Thence I run

N.89°45'W., on a true line betsecs.13 and 24.

Over mountainous land;through heavy cedar and pinon pine
timber.

Asc.abruptly.

.60 Foot of conglomerate ledge,125 ft.high,bears N.and S.

6.50 Top of ridge,500 ft.above cor.,bears N.and S.

Leave timber and enter dense sage and mahogany,bears N.
and S.

Desc.

14.00 Bottom of swale,75 ft.below ridge,course N.

Asc.

22.00 Top of spur,50 ft.above swale,bears N.and S.

Desc.abruptly over a series of ledges.

27.50 Top of ledge,30 ft.high,bears N.and S.

34.00 Leave ledges,bears N.and S.

Continue descent .

40.84 Set an iron post,3 ft.long,1 in.in dia.,26 ins.in the
ground,for $\frac{1}{4}$ sec.cor..mkd.on brass cap $\frac{1}{4}$ S 13 in N half
and S 24 in S half;from which

A mahogany,8 ins.dia.,bears N.7°E.,54 lks.

dist..mkd. $\frac{1}{4}$ S 13 B T.No other trees within limits;raise a mound of stone,
w2 ft.base,1 $\frac{1}{2}$ ft.high,N.of cor.

Subdivision of T.32 S., R.6 W.-Continued.

Chains

50.00 Bottom of swale, 400 ft. below ridge, course NW.

Asc.

59.00 Top of spur, 75 ft. above swale, bears NW and SE.

Desc.

80.84 The cor. of secs. 13, 14, 23, and 24.

Land, mountainous very steep and rugged.

Soil, rich loam about 1 ft. deep, mixed with volcanic rock

Substrat, rock.

Timber, cedar and pinon pine on E. 6.50 chs.

Undergrowth, sage and mahogany.

Good grass in patches.

Mountainous or heavily timbered land, or land covered
with dense undergrowth, 80.84 chs.

October 20, 1910.

Ervinby Stewart

Instrumentman G.L.O.

Survey commenced October 21, 1910, and executed with a Young and Sons light mountain transit No. 7382, with solar attachment. The horizontal limb is provided with two double verniers placed opposite to each other, reading to single minutes of arc; which is also the least count of the latitude and declination arcs. The instrument was examined, tested on the meridian at Salt Lake City, found correct, and was approved by the surveyor general for Utah on August 6, 1910.

Note test of Instrument see notes of Retracement Subdivision, this township.

At the cor. of secs. 9, 10, 15, and 16, heretofore described I set off 38°03' N., on the lat. arc; 10°37' S., on the decl.

Subdivision of T.32 S., R.6 W.-Continued.

Chains

arc; and at 3 h 45 m p.m., l.m.t., I determine a meridian with the solar.

Thence I run

North, on a random line bet. secs. 9 and 10.

40.00 Set temp. $\frac{1}{2}$ sec.cor.

80.00 Set temp.cor. of secs. 3, 4, 9, and 10.

October 21, 1910.

October 22, 1910: At 7 h 45 m a.m., l.m.t., I set off $38^{\circ}03'N$ on the lat.arc; $10^{\circ}51'S.$, on the decl.arc; and determine a meridian with the solar, at the temp.cor. of secs. 3, 4, 9, and 10. thence I run

East, on a random line bet. secs. 3 and 10.

40.00 Set temp. $\frac{1}{2}$ sec.cor.

78.58 Intersect N. and S. line, 58 lms. N. of the cor. of secs.

2, 3, 10, and 11, heretofore described. The falling is out of limits; therefore I begin at the cor. of secs. 2, 3, 10, and 11.

Thence I run

West, on a true line bet. secs. 3 and 10.

Over mountainous land; through dense undergrowth.

Dense.

.45 Top of conglomerate ledge, 20 ft. high, bears N. and S.

23.00 Bottom of hollow, 50 ft. below cor., course S. $50^{\circ}E.$

acc.

34.00 Enter heavy red and white pine timber, bears NW and SE.

40.00 Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for $\frac{1}{2}$ sec.cor.. mkd. on brass cap $\frac{1}{2}$ S 3 in N half and S 10 in S half; from which

A red pine, 12 ins. in dia., bears N. $75^{\circ}W.$, 30 lms.

dist.. mkd. $\frac{1}{2}$ S 3 B T.

A white pine, 14 ins. dia., bears S. $37^{\circ}W.$, 10 lms.

dist.. mkd. $\frac{1}{2}$ S 10 B T.

Subdivision of T.32 S., R.6 W.-Continued.

Chains

- 45.00 Enter series of conglomerate ledges, bears N. and S.
 55.50 Leave ledges, 200 ft. above foot of ledges, bears N. and S.
 60.00 Top of ridge, 500 ft. above hollow, bears N. and S.

Desc.

61.400 Leave timber, bears N. and S.

Enter dense buck and oak brush, bears N. and S.

65.00 Bottom of swale, 50 ft. below ridge, course N.

Asc.

73.00 Top of ridge, 50 ft. above swale, bears N. and S.

Desc.

78.58 Intersect North and South line 58 lks. South of the temp. cor.

At the intersection I

Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground, for cor. of secs. 3, 4, 9, and 10, mkd. on brass cap

T 32 S 4 in NW.

R 6 W S 3 in NE.

S 10 in SE.; and

S 9 in SW. quadrants; from which

A mahogany, 4 ins. dia. bears N. 10° E., 18 lks.

dist.. mkd. T 32 S R 6 W S 3 B T.

A mahogany, 18 ins. dia., bears N. 72° 50' W., 61 lks.

dist.. mkd. T 32 S R 6 W S 4 B T.

No other trees within limits; raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.

Land, mountainous, very steep and rugged covered with rock and ledges.

Timber, red and white pine.

Undergrowth, oak, buck, mahogany, and sage brush.

Good grass for grazing.

Mountainous or heavily timbered land, or land covered with dense undergrowth, 78.58 chs.

Subdivision of T.32 S., R.6 W.-Continued.

Chains	
	South, on a true line bet. secs. 9 and 10.
	Over mountainous land; through dense undergrowth.
	Desc.
17.40	Bottom of hollow, 100 ft. below cor., course W.
	Asc.
33.50	Top of ridge, 150 ft. above hollow, bears E. and W.
	Desc.
39.42	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for $\frac{1}{2}$ sec. cor.. mkd. on brass cap $\frac{1}{2}$ S 9 in W half and S 10 in E half; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.
50.00	Road from Beaver to Panguich, bears N. 80° E. and S. 80° W.
51.00	Wash, 20 lks. wide, 10 ft. deep, in canon, 250 ft. Below ridge, course S. 80° W.
	Asc.
63.00	Top of ridge, 100 ft. above canon, bears E. and W.
	Desc.
67.00	Bottom of hollow, 50 ft. below ridge, course W.
	Asc.
75.40	Top of main ridge, 50 ft. above hollow, bears E. and W.
	Desc.
79.42	The cor. of secs. 9, 10, 15, and 16. Land, mountainous, with gradual slopes, and smooth. Soil, sandy and clay loam about 2 ft. deep, mixed with volcanic rock ; Subsoil, gravel and clay. No timber. Undergrowth, oak, sage, and mahogany. Good grass for grazing. Mountainous land, or land covered with dense undergrowth.
79.42 chs.	October 22, 1910: At this cor. I set off $10^{\circ}56'N.$, on the decl. arc; and at 11 h 45 m a.m., l.m.t., I observe the sun - on the meridian the resulting lat. is $38^{\circ}03'N.$, which is the proper lat. nearly.

Subdivision of T.32 S., R.6 W.-Continued.

Chains	
	North, on a true line bet. secs. 3 and 4, on sectional guide meridian. knowing that the line will not intersect N.bdy. of Tp. within limits;
	Over mountainous land; through dense undergrowth. Asc. over conglomerate boulders.
10.00	Foot of perpendicular conglomerate ledge, 50 ft. high, bears E. and W. Thence over a series of ledges.
39.60	Leave ledges, bears E. and W. Enter dense mahogany brush, bears E. and W.
40.00	Set an iron post, 3 ft. long, 1 in. in dia., 18 ins. to solid rock, for $\frac{1}{4}$ sec. cor. mkd. on brass cap $\frac{1}{4}$ S 4 in W half and S 3 in E half; from which A mahogany, 8 ins. dia., bears S. 60° E., 65 lks. dist. .mkd. $\frac{1}{2}$ S 3 B T. A mahogany, 10 ins. dia., bears N. 43° W., 34 lks. dist. .mkd. $\frac{1}{2}$ S 4 B T.
40.60	Top of ridge, 700 ft. above sec. cor., bears E. and W. Desc.
41.50	Leave mahogany and enter heavy pine and aspen timber, bears E. and W.
57.00	Leave timber and enter dense mahogany and scattering sage brush, bears E. and W.
62.00	Leave mahogany and enter dense sage and buck brush, bears NW and SE.
78.06	Intersect N.bdy. of Tp., 390 lks. East of the cor. of secs. 3, 4, 33, and 34, heretofore described. Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground, for closing cor. of secs. 3 and 4, mkd. on brass cap C C T 31 S R 6 W S 33 S 34 in N half. R 6 W S 3 in SE.; and T 32 S S 4 in SW. quadrants; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, S. of cor. Note: I destroy all marks on the cor. of secs. 3, 4, 33, and 34

Subdivision of T.32 S., R.6 W.-Continued.

Chains	which pertain to secs. 3 and 4.
	Land, mountainous very steep and rough covered with boulders and ledges on S.39.60 chs.
	Soil, on entire mile is rich black loam but the soil is mostly rock on the S.39.60 chs. Subsoil, clay and rock.
	Timber, pine and aspen on N slope of ridge.
	Undergrowth, sage, oak, buck, and mahogany.
	Good grass for grazing on the north slope of ridge and in the ledges where there is any soil.
	Mountainous or heavily timbered land, or land covered with dense undergrowth, 78.06 chs.

4 p.m. October 22, 1910.

October 18, 1910: At 7 h 45 m a.m., l.m.t., I set off $38^{\circ}00'N.$ on the lat.arc; $9^{\circ}25'S.$, on the decl.arc; and determine a meridian with the solar, at the cor.of secs. 28, 29, 32, and 33, heretofore described.

Note: Knowing from retracement made that the line betsecs. 29 and 32 will not intersect within limits;

I run

S. $89^{\circ}55'W.$, on a true line betsecs. 29 and 32.

Over mountainous land; through dense undergrowth.

Asc.

18.00 Top of ridge, 100 ft. above cor., bears N. and S.

Desc.

30.00 Bottom of hollow, 100 ft. below ridge, course S.

Asc.

35.50 Top of spur, 40 ft. above hollow, bears N. $5^{\circ}W.$ and S. $5^{\circ}E.$

Desc.

37.00 Bottom of swale, 40 ft. below spur, course S. $5^{\circ}E.$

Asc.

40.00 Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for $\frac{1}{2}$ sec.cor.. mkd. on brass cap $\frac{1}{4}$ S 29 in N half

Subdivision of T.32 S., R.6 W.-Continued.

- Chains and S 32 in S half; and raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$ ft. high, N. of cor.
- 61.00 Top of knoll, on top of ridge, 200 ft. above hollow, ridge bears N.20°W. and S.20°E.
Desc.
- 68.00 Bottom of swale, 75 ft. below knoll, course S.
Asc.
- 82.73 Intersect N. and S. line, 135 lks. N.0°17'W. of the cor. of secs. 29, 30, 31, and 32, heretofore described.
Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground, for closing cor. of secs. 29 and 32, mkd. on brass cap
T 32 S R 6 W in N half.
C C S 30 S 31 in W half;
S 29 in NE.; and
S 32 in SE. quadrants; and raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$ ft. high, E. of cor.
Note I destroy all marks on the cor. of secs. 29, 30, 31, and 32, which pertain to secs. 29 and 32.
Land, mountainous fairly steep with rich black loam soil, about 2 ft. deep, producing a good growth of grass and dense undergrowth of oak, sage, mahogany, and buck brush.
Mountainous land, or land covered with dense undergrowth,
82.73 chs.
October 18, 1910: At this cor. I set off 90°00'E., on the decl. arc; and at 11 h 45 m a.m., l.m.t., I observe the sun on the meridian, the resulting lat. is 38°00'N., which is the proper lat. nearly.

For reasons already explained I run
S.89°55'W., on a true line bet. secs. 20 and 29.
Over mountainous land; through dense undergrowth.
Asc. abruptly.
- 15.00 Begin more gradual ascent, bears N. and S.

Subdivision of T.32 S., R.6 W.-Continued.

Chains

- 40.00 Set an iron post, 3 ft. long, 1 in. in dia., 20 ins. in the ground, on bed rock, and surrounded by mound of stone, for $\frac{1}{4}$ sec.cor.. mkd.on brass cap $\frac{1}{4}$ S 20 in N half, and S 29 in S half; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, N.of cor.
- 40.50 Top of main ridge, 300 ft. above hollow, bears N. and S.
Desc.
- 76.20 Bottom of hollow, 300 ft. below ridge, course NW.
Asc.
- 79.50 Top of spur, 60 ft. above hollow, bears NW and SE.
Desc.
- 82.91 Intersect N. and S. line, 78 lks. N. $0^{\circ}32'W.$, of the cor. of secs. 19, 20, 29, and 30, heretofore described.
Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground, for closing cor. of secs. 20 and 29, mkd.on brass cap
T 32 S R 6 W in N half
C C S 19 S 30 in W half.
S 20 in NE.; and
S 29 in SE.; quadrants; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, E.of cor.
Note: I destroy the marks on the cor. of secs. 19, 20, 29, and 30 which pertain to secs. 20 and 29.
Land, mountain steep mountain sides covered with dense undergrowth of oak, sage, and mahogany.
Soil, black loam mixed with rock about 2 ft. deep, on sub-soil, of gravel.
Good grass for grazing.
Mountainous or heavily timbered land, or land covered with dense undergrowth, 82.91 chs.
-
- North, on a random line bet. secs. 20 and 21.
- 40.00 Set temp. $\frac{1}{4}$ sec.cor.

Subdivision of T.32 S., R.6 W.-Continued.

Chains	
80.00	Set temp.cor.of secs.16,17,20, and 21. October 18, 1910.
	October 19, 1910: At 7 h 45 m a.m., l.m.t., I set off 38°02' N. on the lat.arc; 9°47'S., on the decl.arc; and determine a meridian with the solar, at the cor.of secs.16,17,20, and 21. Thence I run East, on a random line betsecs.16 and 21.
40.00	Set temp. $\frac{1}{4}$ sec.cor.
81.48	Intersect N.and S.line, 52 lks.N. of the cor.of secs.15,16, 21, and 22. The falling is out of limits; therefore I begin at the cor.of secs.15,16,21, and 22, Thence I run West, on a true line betsecs.16 and 21. Over mountainous land; through dense undergrowth. Asc.
15.50	Top of spur, 120 ft.above cor., bears N.70°W. and S.70°E. Desc.
16.20	Enter heavy timber, bears N. and SW.
27.50	Bottom of hollow, 70 ft.below spur, course S.30°E. Asc.
30.20	Top of spur, 50 ft.above hollow, bears NW and SE. Desc.
40.00	Set an iron post, 3 ft.long, 1 in.in dia., 26 ins.in the ground, for $\frac{1}{4}$ sec.cor.. mkd.on brass cap $\frac{1}{4}$ S 16 in N half and S 21 in S half; from which A red pine, 11 in.dia., bears N.30°W., 64 lks. dist..mkd. $\frac{1}{4}$ S 16 B T. A yellow pine, 9 ins.dia., bears S.82°W., 27 lks. dist..mkd. $\frac{1}{4}$ S 21 B T.
40.80	Bottom of hollow, 100 ft.below spur, course S.80°E.

Subdivision of T.32 S., R.6 W.-Continued.

Chains

45.20 Top of spur, 60 ft. above hollow, bears NE and SW.

Desc.

54.50 Bottom of hollow, 100 ft. below spur, course N.70°E.

Asc.

58.50 Top of spur, 80 ft. above hollow, bears N. and S.

Desc.

62.50 Bottom of hollow, 50 ft. below spur, course S.60°E.

Asc.

65.00 Top of spur, 50 ft. above hollow, bears N. and S.

Desc.

65.90 Bottom of hollow, 30 ft. below spur, course N.50°E.

Asc.

67.20 Top of spur, 50 ft. above hollow, bears N. and S.

Desc.

71.20 Bottom of hollow, 40 ft. below spur, course S.60°E.

Asc.

72.40 Top of spur, 60 ft. above hollow, bears NE and SW.

Desc.

75.50 Bottom of swale, 40 ft. below spur, course NE:

Asc.

81.48 Intersect N. and S. line, 52 lks. South of the temp.cor. of
secs. 16, 17, 20, and 21.

At the intersection I

Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the

ground, for cor. of secs 16, 17, 20, and 21, mkd. on brass cap

T 32 S S 17 in NW.

R 6 W S 16 in NE.

S 21 in SE.; and

S 20 in SW. quadrants; and raise a mound of stone,
2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.

Land, mountainous very broken and steep.

Soil, sandy loam about 2 ft. deep and mixed with gravel.

SSubsoil, gravel.

Timber, cedar, pinon pine, and yellow pine.

Undergrowth, oak, sage, buck, and mahogany.

Subdivision of T.32 S., R.6 W.-Continued.

Chains

Good grass for grazing.

Mountainous or heavily timbered land, or land covered with dense undergrowth, 81.48 chs.

South, on a true line bet. secs. 20 and 21.

Over mountainous land; through dense undergrowth, and scattering timber.

Asc.

9.00 Top of spur, 100 ft. above cor., bears N.78°W. and S.78°E.

Desc.

12.00 Leave timber, bears S.80°E. and W.

16.75 Bottom of hollow, 150 ft. below spur, course S.80°E.

Asc.

39.48 Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor.. mkd. on brass cap $\frac{1}{4}$ S 20 in W half and S 21 in E half; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.

41.00 Top of spur, 250 ft. above hollow, bears N.85°W. and S.85°

E.

Desc.

56.00 Bottom of hollow, 300 ft. below spur, course S.85°E.

Asc.

63.25 Top of spur, 100 ft. above hollow, bears E. and W.

Desc.

70.60 Bottom of gulch, 75 ft. deep, course N.80°E.

Asc. abruptly.

72.50 Asc. more gradually, bears N.80°E. and S.80°W.

77.50 Top of spur, 50 ft. above gulch, bears N.80°W. and S.80°E.

Desc.

79.48 The cor. of secs. 20, 21, 28, and 29.

Land, very steep and rugged sloping eastward into Bear Creek. Soil, clay loam mixed with gravel and rock, about 1 ft. deep, subsoil gravel and rock.

Subdivision of T.32 S., R.6 W.-Continued.

Chains

Timber, cedar, pinon pine, and yellow pine.

Undergrowth, oak, sage, mahogany, and larb.

Good grass in patches and in the brush.

Mountainous land, or land covered with dense undergrowth,

79.48 chs.

October 19, 1910: At this cor. I set off $9^{\circ}51' S.$, on the decl. arc; and at 11 h 45 m a.m., 1 m.t., I observe the sun on the meridian, the resulting lat. is $38^{\circ}01' N.$, which is the proper lat. nearly.

For reasons already explained I run

$S.89^{\circ}55' W.$, on a true line bet. secs. 17 and 20.

Over mountainous land; through scattering timber and dense undergrowth. Asc.

6.00 Leave timber, bears NE and S.

14.50 Top of main ridge, 250 ft. above cor., bears N.30°E. and S.30°W.

Desc.

26.60 Bottom of swale, 60 ft. below ridge, course SW.

Asc.

32.40 Top of spur, 60 ft. above swale, bears NE and SW.

Desc.

35.60 Bottom of hollow, 40 ft. below spur, course S.

Asc.

40.00 Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for $\frac{1}{2}$ sec. cor.. mkd. on brass cap $\frac{1}{2}$ S 17 in N half and S 20 in S half; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, N. of cor.

48.70 Top of knoll, 150 ft. above hollow, from this knoll ridges run as follows: N.60°E. N.80°W. S. and SW.

Desc.

65.10 Bottom of hollow, 200 ft. below knoll, course N.80°W.

Asc.

Subdivision of T.32 S., R.6 W.-Continued.

Chains	
67.00	Top of spur, 25 ft. above hollow,bears NW and SE.
	Desc.
76.00	Bottom of hollow, 75 ft. below spur, course S.80°W.
	Asc.
83.75	Intersect N. and S.line, 113 lks. N.0°2'E., of the cor.of secs.17,18,19, and 20, heretofore described. Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground, for closing cor.of secs.17 and 20.mkd.on brass cap T 32 S R 6 W in N half. C C S 18 S 19 in W half. S 17 in NE.;and S 20 in SE.;quadrants;and raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$ ft. high, E.of cor. Note:I destroy all marks on the cor.of secs.17,18,19, and 20, which pertain to secs.17 and 20. Land, steep and rugged west and southwest slopes covered with rocks and volcanic boulders. Soil, clay and black loam about 1 ft. deep, mixed with rock. Timber, scattering cedar, pinon pine, and yellow pine. Undergrowth, dense oak, sage, buck, and mahogany. Some good grass for grazing. Mountainous land, or land covered with dense undergrowth, 83.75 chs.
	N.0°1'W., on al random line bet. secs.16 and 17.
40.00	Set it temp. 1 sec.cor.
80.34	Intersect E. and W.line 69 lks S.89°45'W., of the cor.of secs.8,9,16, and 17, which is a limestone, 12x10x9 ins., above ground, firmly set, and mkd.and witnessed as described by the surveyor general, The cor.stone is poorly mkd.and not sufficiently witnessed; therefore I destroy the old cor.and reestablish it in the same place as follows:

Subdivision of T.32 S., R.6 W.-Continued.

Chains

Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground, for cor. of secs. 8 and 9 (As there will be a closing cor. of secs. 16 and 17.) mkd. on brass cap

T 32 S S 8 in NW.; and

R 6 W S 9 in NE. quadrants; from which

A red cedar, 6 ins. dia., bears N. 50° E., 52 lks.

dist.. mkd. T 32 S R 6 W S 9 B T.

A mahogany, 4 ins. dia., bears N. 18° W., 12 lks.

dist.. mkd. T 32 S R 6 W S 8 B T.

At my intersection with the east and west line as above noted I

Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground, for closing cor. of secs. 16 and 17, mkd. on brass cap

C C T 32 S R 6 W S 8 S 9 in N half.

S 16 in SE.; and

S 17 in SW. quadrants; from which

A mahogany, 8 ins. dia., bears S. 55° E., 52 lks.

dist.. mkd. T 32 S R 6 W S 16 B T.

A mahogany 8, ins. dia., bears S. 52° W., 26 lks.

dist.. mkd. T 32 S R 6 W S 17 B T.

Thence I run

S. 0° 1' E., on a true line bet. secs. 16 and 17.

Over mountainous land; through heavy cedar and pinon pine timber and scattering mahogany and buck brush.

Desc.

5.00 Bottom of hollow, 100 ft. below cor., course SW.

Asc.

9.60 Top of spur, 30 ft. above hollow, bears NE and SW.

Desc.

27.00 Bottom of hollow, 100 ft. below spur, course W.

Asc.

31.30 Top of spur, 30 ft. above hollow, bears E. and W.

Desc.

34.00 Bottom of swale, 20 ft. below spur, course N. 80° W.

Asc.

Subdivision of T.32 S., R.6 W.-Continued.

Chains

40.17 Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for $\frac{1}{2}$ sec.cor.. mkd.on brass cap $\frac{1}{4}$ S 17 in W half and S 18 in E half; from which

A red pine, 18 ins. dia., bears N.22°E., 33 lks.
dist.. mkd. $\frac{1}{4}$ S 16 B.T.

A cedar, 6 ins. dia., bears N.67°W., 19 lks.
dist.. mkd. $\frac{1}{4}$ S 15 B.T.

58.50 Top of main ridge, 300 ft. above swale, bears NW and SE.

Desc.

77.00 Bottom of hollow, 125 ft. below ridge, course SE.

Asc.

80.34 The cor.of secs.16,17,20, and 21.

Land, high ridges and steep canons N.58.50 chs. drains and slopes Westerly and S.21.84 chs. drains and slopes easterly into Lower Bear Valley.

Soil, rich black loam very productive about 2 ft. deep, subsoil, gravel and clay.

Timber, cedar and pinon pine and a few red and yellow pines.

Undergrowth, mahogany.

Good grass for grazing on N.58.50 chs.

Mountainous or heavily timbered land, or land covered with dense undergrowth, 80.34 chs.

October 19 1910.

October 20, 1910: At 2 h 45 m p.m., l.m.t., I set off 38°03'N., on the lat.arc; 10°15'S., on the decl.arc; and determine a meridian with the solar, at the cor.of secs.8 and 9.

Thence I run

N.0°1'W., on a random line betsecs.8 and 9.

40.00 Set temp. $\frac{1}{2}$ sec.cor.

80.46 Intersect E. and W.line, 115 lks. East of the cor.of secs.

Subdivision of T.32 S., R.6 W.-Continued.

Chains

- 4,5,8, and 9, which is a sandstone, 11x11x10 ins. above ground, firmly set, and mkd. and witnessed as described by the surveyor general, I destroy the old cor. and re-establish it in the same place as follows:
- Set an iron post, 3 ft. long, 2 ins. in dia., 18 ins. in the ground, on bed rock, and surrounded by mound of earth and stone, for the southeast cor. of sec. 5 (knowing from retracements already made that a closing cor. will be required on the line bet. secs. 4 and 9 as well as bet. secs. 8 and 9, thus leaving this cor. only for the southeast cor. of sec. 5) mkd. on brass cap.
- T. 32 S R 6 W in N half.
- S 5 in NW quadrants; from which
- A cedar, 30 ins. dia., bears N.68°W., 49 lks.
dist..mkd.T 32 S R 6 W S 5 B T.
- At my intersection with the east and west line 115 lks. east of the southeast cor. of sec. 5 I
- Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground, for the northeast cor. of secs. 8 (for the reason above noted) mkd. on brass cap.
- T 32 S R 6 W in N half.
- S 8 in SW. quadrants; from which
- A cedar, 6 ins. dia., bears S.42°30'W., 88 lks.
dist..mkd.T 32 S R 6 W S 8 B T.
- Thence I run
- S.0°1'E., on a true line bet. secs. 8 and 9.
- Over mountainous land; through scattering cedar and pinon pine timber and dense sage, oak, and buck brush.
- Desc.
- 12.30 Wash, 50 lks. wide, 10 ft. deep, course N.80°W. in canon, 100 ft. below cor., course N.70°W. Asc. steep north slope.
- 13.30 Road from Beaver to Pangmitch, bears N.70°W. and S.70°E.
- 40.23 Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for $\frac{1}{4}$ sec.cor..mkd.on brass cap $\frac{1}{4}$ S 8 in W half

Subdivision of T.32 S., R.6 W.-Continued.

Chains	S.9 in E half; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.
42.00	Enter dense larb, bears E. and W. Oak and buck brush scattering.
60.00	Top of ridge, 800 ft. above canon, bears E. and W. Leave larb and enter heavy cedar and pinon pine timber, bears E. and W.
	Desc.
80.46	The cor. of secs. 8 and 9. 200 ft. below ridge.. Land, high steep mountains slope north and west. Soil, rich black loam from 1 to 3 ft. deep, mixed with some rock and gravel in patches. Subsoil, gravel and rock. Timber, cedar and pinon pine on S. 20.60 chs. Undergrowth, oak, sage, mahogany, buck, and larb brush. Good grass for grazing on north slope of high ridge. Mountainous or heavily timbered land, or land covered with dense undergrowth, 80.46 chs.
	October 20, 1910.
	— — —
	October 22, 1910: At 3 h 45 m p.m., l.m.t., I set off $38^{\circ}03'$ N., on the lat. arc; $10^{\circ}58' S.$, on the decl. arc; and determine a meridian with the solar, at the cor. of secs. 3, 4, 9, and 10. Thence I run West, on a true line bet. secs. 4 and 9. Knowing from connections already made that the line will not close within limits;. Over mountainous land; through dense oak, sage brush and buck brush. Desc.
5.20	Bottom of hollow, 200 ft. below cor., course S. $10^{\circ}W.$ Asc.

Subdivision of T.32 S., R.6 W.-Continued.

Chains

- 7.00 Top of spur, 30 ft. above hollow, bears NE and SW.
 Desc.
 30.20 Bottom of hollow, 50 ft. below spur, course SW.
 Asc.
 33.50 Top of spur, 30 ft. above hollow, bears N.20°E. and S.20°W.
 Desc.
 35.00 Bottom of hollow, 30 ft. below spur, course S.15°W.
 Asc.
 39.00 Top of ridge, 75 ft. above hollow, bears N. and S.
 Desc.
 40.00 Set an iron post, 3 ft. long, 1 in. in dia., 18 ins. in the ground, on bed rock, and surrounded by mound of earth and stone, for $\frac{1}{4}$ sec. cor.. mkd. on brass cap $\frac{1}{4}$ S 4 in N half and S 9 in S half; and raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$ ft. high, N. of cor.
 42.50 Bottom of swale, 30 ft. below ridge, course S.10°W.
 Asc.
 45.00 Top of ridge, 20 ft. above swale, bears N.30°E. and S.30°W.
 Desc.
 57.00 Creek, 1 lk. wide, $\frac{1}{2}$ in. deep, in bottom of hollow, 100 ft. below ridge, course S.40°W.
 Asc.
 58.00 Enter scattering cedar and pinon pine timber, bears N. and S.
 64.00 Top of ridge, 75 ft. above hollow, bears NE and SW.
 Desc.
 67.10 Old fence line (only the posts are now standing), bears N.30°E. and S.30°W.
 67.60 Bottom of hollow, 100 ft. below ridge, course S.40°W.
 Asc.
 73.50 Top of spur, 75 ft. above hollow, bears N. and S.
 Desc.
 79.62 Intersect N. and S. line, 155 lks. S.0°1'E., of the northeast

Subdivision of T.32 S., R.6 W.-Continued.

Chains

cor.of sec.8, heretofore described.

Set an iron post, 3 ft. long, 2 ins. in dia., 20 ins. in the ground, on bed rock, and surrounded by mound of earth and stone, for closing cor.of secs.4 and 9, mkd.on brass cap

T 32 S R 6 W. in N half.

CPC S.8 in W half.

S 4 in NE ;and

S 9 in SE.quadrants; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, E. of cor.

Land, broken and steep ridges and hollows, draining and sloping southward .

Soil, sandy and clay loam well mixed with volcanic rock the soil is from 1 to 2 ft. deep, on subsoil of clay and gravel.

Timber, a few scattering cedars and pinion pine.

Undergrowth, oak, sage, buck, and mahogany brush.

Good grass for grazing in patches.

Mountainous land, or land covered with dense undergrowth, 79.62 chs.

October 22, 1910.

October 21, 1910: At 3 h 45 m p.m., l.m.t., I set off $38^{\circ}03'$ N., on the lat.arc; $10^{\circ}37'$ S., on the decl.arc; and determine a meridian with the solar, at the southeast cor.of sec. 5,

Thence I run

$11.0^{\circ}1'W.$, on a true line bet.secs.4 and 5.

Over mountainous land; through scattering timber and dense undergrowth.

Acc.

5.00 Leave timber, bears E. and W.

20.00 Top of ridge, 200 ft. above cor. bears NW and SE.

Desc.

Subdivision of T.32 S., R.6 W.-Continued.

Chains

- 33.00 Bottom of hollow, 100 ft. below ridge, course N.70°W.
Asc.
- 39.00 Top of spur, 60 ft. above hollow, bears N.60°E. and S.60°W.
Desc.
- 40.00 Set an iron post, 3 ft. long, 1 in. in dia., 19 ins. in the ground, on bed rock, and surrounded by mound of stone, for $\frac{1}{4}$ sec.cor..mkd.on brass cap $\frac{1}{4}$ S 5 in W half and S 4 in E half; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W.of cor.
- 44.50 Bottom of hollow, 50 ft. below spur, course SW.
Asc.
- 60.50 Top of ridge, 100 ft. above hollow, bears N.60°W. and S.60°E.
Desc.
- 76.18 Intersect N.bdy. of T., 2.69 chs.S.89°55'E., from the cor. of secs.4,5,32, and 33, heretofore described.
Set an iron post, 3 ft. long, 2 ins. in dia., 20 ins. in the ground, on solid rock, and surrounded by mound of earth and stone, for closing cor.of secs.4 and 5,mkd.on brass cap

C CT 31 S R 6 W S 32 S 33 in N half.

R 6 W S 4 in SE.; and

T 32 S S 5 in SW. quadrants; from which

A volcanic boulder 10x10x6 ins., bears S.55°W., 16 lks.dist..mkd.* B O .S.5

And raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, S.of cor.

Note:I destroy all marks on the cor.of secs.4,5,32, and 33,which pertain to secs.4 and 5.

Land, mountainous steep and rocky.

Soil, clay loam mixed with large rock, about 2 ft. deep, subsoil clay and rock.

Timber, scattering cedar and pinon pine.

Undergrowth, oak, sage, buck, and mahogany.

A very little grass.

Subdivision of T.32 S., R.6 W.-Continued.

Chains

Mountainous land, or land covered with dense undergrowth,
76.18 chs.

October 21, 1910.

Instrumentation G.L.O.

Quincy Stewart

Instrumentamn G.L.O.

General Description.

This township occupies a range of mountains between Buckskin Valley on the west and Lower Bear Valley on the east; these valleys were surveyed in early days for prospective settlers and the mountains between were considered impossible to survey. Both valleys were settled at that time and Lower Bear Valley is now occupied by ranchers but Buckskin Valley has apparently been abandoned.

The mountains between the valleys above mentioned and in this township are generally high and steep, covered with a dense growth of oak, sage, buck, mahogany, and larb brush and with the exception of a number of steep slopes there is a good growth of cedar and pinon pine timber with occasional patches of red white and yellow pine.

The sedimentary formation is white sandstone, but it is covered from 200 to 600 ft. with a volcanic overflow, and the sandstone outcrops only in the deep canons and hollows.

The soil is generally a loam from the decomposition of the volcanic rock with occasional patches of sandy loam.

The soil is well mixed with large and small volcanic rock and covered in many places with the same material.

There is some land suitable for cultivation along the east and west foot hills in the edges of the two valleys mentioned above, but the mountains proper are only suitable for grazing purposes.

There are a number of small springs in the towship suf-

Subdivision of T.32 S., R.6 W.-Continued.

ficient for grazing purposes. There is a small spring in section 8 and one in sec. 30 not seen from line. We discovered no indications of mineral in the township. There are no settlers in the part of this township surveyed by us.

John R Stewart
Dunphy Stewart
Instrumentman G.L.O.

October 22, 1910.

FINAL OATHS OF DEPUTY SURVEYOR AND HIS ASSISTANTS.

LIST OF NAMES.

A list of the names of the individuals employed by Quinby Stewart

Instrumentman G. L. O., United States Deputy Surveyor, to assist in running, measuring, and marking the lines and corners described in the foregoing field notes of the survey of Retracement Sub. and Sub. T.33 S., Rs. 7 and 8 W.; and T.32 S., Rs. 6 and 7 W.

showing the respective capacities in which they acted:

Verne O. Nelson, Chainman.

Alton Ivie, Chainman.

Harvey W. Elliott, Moundman.

, Moundman.

Nicholas L. Sheffield, Axman.

, Axman.

Milo Nelson, Flagman.

, Flagman.

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted Quinby Stewart

Instrumentman G. L. O., United States Deputy Surveyor, in surveying all those parts or portions of the Retracement Sub. and Sub. T.33 S., Rs. 7 and 8 W. and T.32 S., Rs. 6 and 7 W.

of the Salt

Lake Base and meridian, State of Utah, which are represented in the foregoing field notes as having been surveyed by him and under his direction; and that said survey has been in all respects, to the best of our knowledge and belief, well and faithfully surveyed, and the corner monuments established, according to the instructions furnished by the United States Surveyor General for Utah.

Verne O. Nelson, Chainman.

Alton Ivie, Chainman.

Harvey W. Elliott, Moundman.

, Moundman.

Nicholas Sheffield, Axman.

, Axman.

Milo Nelson, Flagman.

Subscribed and sworn to before me this 22nd
day of October 1910. ^{190x}

Quinby Stewart
Instrumentman G. L. O.

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FINAL OATH OF UNITED STATES DEPUTY SURVEYOR.

I, _____, United States Deputy Surveyor, do solemnly swear that, in pursuance of a contract received from United States Surveyor General for _____, bearing date of the day of _____, 190_____, I have well, faithfully, and truly, in my own proper person, and in strict conformity with the instructions furnished by the United States Surveyor General for _____, the Manual of Surveying Instructions, and the laws of the United States, surveyed all those parts or portions of _____

of the _____ meridian, in the _____ of _____, which are represented in the foregoing field notes as having been surveyed by me, and under my direction; and I do further solemnly swear that all the corners of said survey have been established and perpetuated in strict accordance with the Manual of Surveying Instructions, and the special written instructions of the United States Surveyor General for _____ and in the specific manner described in the field notes, and that the foregoing are the original field notes of such survey.

United States Deputy Surveyor.

Subscribed by said _____, and sworn to before me }
this _____ day of _____, 190 }



APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

, 190

The foregoing field notes of the survey of _____

executed by _____ under his contract No. _____, dated _____, 190_____, having been critically examined, and the necessary corrections and explanations made, the said field notes, and the surveys they describe, are hereby approved.

United States Surveyor General.

I certify that the foregoing transcript of the field notes of the above-described surveys in _____, has been correctly copied from the original notes on file in this office.

United States Surveyor General.

FINAL OATHS OF DEPUTY SURVEYOR AND HIS ASSISTANTS.

LIST OF NAMES.

A list of the names of the individuals employed by John R. Stewart
 Instrumentman G.L.O., United States Deputy Surveyor, to assist in running, measuring, and marking the lines and corners described in the foregoing field notes of the survey of the retracement subdivision and subdivision T.33 S., Rs.7 and 8 W. and Tp.32 S., Rs. 6 and 7 W.
 showing the respective capacities in which they acted:

Frank S. Allen /, Chainman.
 R. Bert Carter /, Chainman.
 Ruban W. Riley /, Moundman.
 Isaac R. Hayes /, Moundman.
 William Carter /, Axman.
 William Carter /, Flagman.

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted John R. Stewart
 Instrumentman G.L.O., United States Deputy Surveyor in surveying all those parts or portions of the Retracement Subdivision and subdivision of T.33 S., Rs.7 and 8 W.; and Tp.32 S., Rs.6 and 7 W.

of the Salt Lake Base and meridian, State of Utah, which are represented in the foregoing field notes as having been surveyed by him and under his direction; and that said survey has been in all respects, to the best of our knowledge and belief, well and faithfully surveyed, and the corner monuments established, according to the instructions furnished by the United States Surveyor General for Utah.

Frank S. Allen /, Chainman.
 R. Bert Carter /, Chainman.
 Ruban W. Riley /, Moundman.
 Isaac R. Hayes /, Moundman.
 Isaac R. Hayes /, Axman.
 Isaac R. Hayes /, Axman.
 William Carter /, Flagman.

Subscribed and sworn to before me this 22nd
 day of October 1910. }

COOEOO
O SEAL O
COOEOO

John R. Stewart
Instrumentman G.L.O.

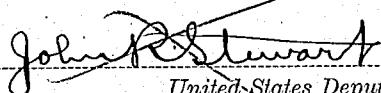
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FINAL OATH OF UNITED STATES DEPUTY SURVEYOR.

I, _____, United States Deputy Surveyor, do solemnly swear that, in pursuance of a contract received from _____, United States Surveyor General for _____, bearing date of the _____ day of _____, 190_____, I have well, faithfully, and truly, in my own proper person, and in strict conformity with the instructions furnished by the United States Surveyor General for _____, the Manual of Surveying Instructions, and the laws of the United States, surveyed all those parts or portions of _____.

For final oath of transitmen see book "Z¹²" T. 31 S., R. 9 W.

of the _____ meridian, in the _____ of _____, which are represented in the foregoing field notes as having been surveyed by me, and under my direction; and I do further solemnly swear that all the corners of said survey have been established and perpetuated in strict accordance with the Manual of Surveying Instructions, and the special written instructions of the United States Surveyor General for _____ and in the specific manner described in the field notes, and that the foregoing are the original field notes of such survey.


John R. Stewart

United States Deputy Surveyor.

Subscribed by said _____, and sworn to before me }
this _____ day of _____, 190_____ }



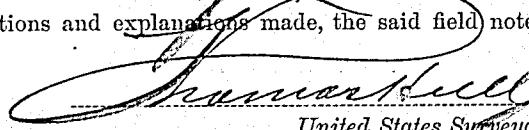
APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Salt Lake City, Utah, January 7, 1914.

The foregoing field notes of the survey of the subdivisional lines of Township No. 32 South, Range No. 6 West of the Salt Lake Base and Meridian, Utah,

executed by John R. Stewart and Quinby Stewart
under their special instructions dated August 6, 1910, 190_____, having been critically examined, and the necessary corrections and explanations made, the said field notes, and the surveys they describe, are hereby approved.


George W. Marshall

United States Surveyor General.

I certify that the foregoing transcript of the field notes of the above-described surveys in _____, has been correctly copied from the original notes on file in this office.


United States Surveyor General.